ACTING ETHICALLY: BEHAVIOR AND THE SUSTAINABLE SOCIETY

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Thesis Prepared for the Degree of

MASTER OF ARTS

UNIVERSITY OF NORTH TEXAS

August 2007

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Sewell, Patrick. Acting Ethically: Behavior and the Sustainable Society. Master of Arts (Philosophy), August 2007, 94 pp., references, 96 titles.

One of the most important factors for creating the sustainable society is that the individuals in that society behave in an environmentally sustainable fashion. Yet achieving appropriate behavior in any society is difficult, and the challenge is no less with regards to sustainability. Three of the most important factors for determining behavior have recently been highlighted by psychologists: personal efficacy, social influence, and internal standards. Because these three factors play a prominent role in behavior, it is necessary to examine what role they play in creating sustainability and how they may be utilized to achieve optimal behavior patterns. Ultimately, in order to achieve sustainability solutions must focus on individual action, realistic governmental regulation, and sustained, direct encounters with the natural world. While much time and energy has been spent on social influence and personal efficacy, less has been devoted to internal standards and this area needs more attention if there is to be any realistic attempt at creating proper behavior patterns.

ACKNOWLEDGEMENTS

I would like to express thanks first and foremost to my family whose sacrifice allowed for the time and energy that it took to complete this project. Without their willing assistance I would have been unable to pursue something which I deeply enjoy. I would also like to acknowledge the help and assistance given to me from my committee; Dr. Rozzi allowed me the flexibility to work in a way I was most comfortable with, Dr. Hargrove was willing work on this project with very little notification and give it his full attention, and Dr. Kaplan has inspired me to explore new areas of study. Finally, thanks to James Stacy Taylor, who taught the very first philosophy class I ever took, and instilled in me an eternal love of wisdom.

TABLE OF CONTENTS

Page

INTRODUCTION

BEHAVIOR AND SUSTAINABILITY

The State of the World

We are living in a time of crisis. Within the last century, the health and stability of the natural environment has been steadily deteriorating. Indeed, fundamental environmental problems such as pollution, species loss, global warming, deforestation, and so on are becoming increasingly worse.[1] To look at just one facet of our current environmental ills consider loss of biodiversity. Species and habitat are being wiped at an incredible rate due to growing population and consumption rates, as well as rapid and aggressive economic globalization. The tropical rainforests, long a flagship for environmental causes and storehouses of the majority of the world's genetic and species diversity, are currently being destroyed at an alarming rate. To quote some representative numbers, Madagascar has lost sixty-six percent of its tropical forests, sixty-eight percent of the Congo's rain forest is slated for clearing while every year fourteen-thousand-square kilometers of rain forest in the Amazon Basin is destroyed.[2] Of course, it is not only forests that are being squeezed, a number of important species have seen their numbers drop dramatically in the last thirty years. One report claims that up to a quarter of the world's monkeys will not survive another

[1] It is sometimes argued that environmental conditions are getting better rather than worse, though this view is in the definite minority; see especially Bjørn Lomborg, *The Skeptical Environmentalist: Measuring the State of the Real World* (Cambridge, UK: Cambridge University Press, 2001) and Mark Sagoff, "Do We Consume Too Much?" In *Atlantic Monthly* 279, no.6 (June 1997): pp. 80-96. For a thorough and up to date source for current environmental problems and solution is the "State of the World" series put out annually by the World Watch Institute.

[2] G. Tyler Miller, Jr., *Living in the Environment*, 11th ed. (Pacific Grove, California: Brooks/Cole, 2000), pp. 14–15.

two decades; another warned that the tiger may be extent within the next twenty years while another laments the decline of the sharks, noting that the hammerhead and the great white sharks have been reduced by upwards of seventy percent in the last fifteen years, while others, like the silky white tip, have disappeared from some areas altogether. [3] In fact, one report even goes so are at to ague that humans may actually be *preventing* new species from forming![4] And if charismatic animals are in these dire straights, one can expect that animals less popular such as insects and other unattractive specimens are may be having far more urgent problems.

But it is not just charismatic species and aesthetic marvels that are being seriously jeopardized. Elements of the natural world which humans rely on on a daily basis are also being seriously affected by environmental problems. Cropland, for example, has been seriously degraded. Forty percent of North America's range and cropland has lost productivity, seventy-two percent of range and cropland in central Asia from the Middle East to China has been lost and six hundred and forty thousand square kilometers of land south of the Sahara have turned to desert since 1940.[5] Likewise, fresh water, one of our most important

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[3] For reference to the studies on primates see Gibby Zobel "Brazil Monkeys Stare Extinction in the Face," *Aljazeera.Net*, 4 May 2005, published at http://english.aljazeera.net/NR/exeres/CA B6B9A0-21E5-4C55-9D38-ED2F6AEE8B46.htm. For reference to the study concerning Tigers see Jagpreet Luthra "India hard pressed to save the tiger," *Aljazeera.Net*, 14 August 2006, published at http://english.aljazeera.net/NR/exeres/ 3577D99B-5186-4467-95F3-75F39A269 B11.htm; and for reference to the report on sharks see Juan Forero, "Hidden Cost of Shark Fin Soup: Its Source May Vanish," *New York* Times, 5 January 2006, National Edition, Foreign Desk, p. 4.

[4] Carl Zimmer, "Humans May Have Limiting Effect on the Origin of (New) Species," *New York Times*, 23 May 2006, National Edition, Science Desk, p. 2.

[5] Miller, *Living in the Environment*, pp. 14–5.

resources, is appearing to run dry. Nearly seventy percent of all freshwater currently goes into agriculture; yet, according to the United Nation's Food and Agricultural Organization, agricultural production will need to increase by fifty percent in order to keep pace with demand created by population increase. In other words, a need for a fifty percent increase in water supply, but this will be extremely difficult. Fresh water is currently used for many things besides agriculture; it is also used for cooking, cleaning, sewage, lawns, industry, technology, and a host of other goods and services. It is estimated that industry in the United States alone will soon be using over three hundred and ninety-six billion gallons of water while producing over seventy-nine billion gallons of wastewater.[6] Consequently, growing affluence, technology, and ever-increasing demand for fresh water has caused global water consumption to double every twenty years. Coupled with this growing consumption is the disturbing trend of water pollution, which has increased along with technology, pesticide use, and chemical contamination.

Needless to say, things cannot continue. If we wish to have a beautiful, bountiful and ultimately livable world, there will have to be a fundamental shift in human practices to create what has been termed a *sustainable society* — a society that "manages its economy and population size without exceeding all or part of the planet's ability to absorb environmental insults, replenish its

[6] Maude Barlow and Tony Clarke, *Blue Gold: The Fight to Stop the Corporate Theft of the World's Water* (New York: The New Press, 2002), pp. 6-9.

resources, and sustain human and other forms of life over … thousands of years."[7]

The path to achieving a sustainable society is a long one and it will require a number of social and cultural changes in order to be successfully achieved. One of the most important areas of change will involve lifestyle; how one acts on a day-to-day basis. Those living in industrialized countries are *continually* making decisions affecting environmental well-being. Paper or plastic (or canvas as the case may be), recycling or dumping, organic or conventional; these are daily questions involving lifestyle choices that have a corresponding action. Consequently, how individuals *act* is of the utmost importance in creating a sustainable society.

While there have been scores of authors contributing to the process of *creating* an environmental ethic (and criticizing those theories that have been proposed), much less attention has been focused on the implementation of an environmental ethic, whatever shape it might ultimately take. This point is not trivial: it matters little how theoretically rigorous an environmental ethic is, how internally cogent, or how impervious to academic criticizing; if it is unable to muster sustainable changes in lifestyle and society, it is surely deficient as an environmental ethic. Because of the inextricable link between environmental theory and action, in this thesis I seek to lay out the most important factors influencing behavior and relate them to the *practice* of an environmental ethic.

[7] Miller, *Living in the Environment*, p. 5.

Factors Influencing Behavior

Three of the most important factors involved with individual behavior are the feeling of personal influence on a given scenario, environmental/social influences, and one's own moral standards. If individuals are expected to make significant changes in lifestyle in order to achieve some environmental goal (e.g., riding the bus instead of driving a car in order to reduce greenhouse gas emissions), they must have confidence their actions will effect some change towards the desired goal. As noted in research on self-efficacy,

> Unless people believe that they can bring about desired outcomes and forestall undesired ones by their actions, they have little incentive to act or to persevere in the face of difficulties and adversities. Whatever other factors may operate as guides and motivators, they are rooted in the core belief that one has the power to influence one's own functioning and life circumstances.[8]

One of the factors that reduces an individual's sense of personal influence over environmental problems is the scale of the environmental problems currently being faced. Because many environmental problems are now examined at the global level, solutions are often framed in terms of large national and international entities such as governments and corporations. As a result, there is a perpetuation of the belief that only *groups* are important to environmental issues and that individual actors can contribute little or nothing. While it is undoubtedly the case that group actions can be a powerful force in creating

[8] Albert Bandura et al. "Sociocognitive Self-Regulatory Mechanisms Governing Transgressive Behavior," *Journal of Personality & Social Psychology* 80, no. 1 (2001): 125-135. Quote on p. 125.

change, this certainty does not obviate the importance of individual actors as cultural influencers and motivators, and as *de facto* contributors to problems are solutions. When individual actors realize the importance of their actions for a given end, they will be more likely to engage in those actions. So the first factor important to developing environmentally friendly behavior patterns is the enhancement of belief in one's influence over environmental problems and solutions.

The second factor that plays a pivotal role in determining behavior is environmental/social influences. Often, solutions to environmental problems are framed in terms of social influences, especially in the form of governmental regulation. If environmental problems are ultimately caused by shortsightedness, greed, and otherwise poor decision-making processes on the part of the individual, then an obvious solution would be for society as a whole to seek government-based regulation that strongly dictates personal decision making. Unfortunately, this solution, developed by Hobbes in the 17th century and later applied to environmental problems in the 20th century, falls short of solving environmental problems. One of the main limitations of governmental coercion is that it is based on erroneous assumptions concerning human nature. Indeed, not all environmental choices are made due to humans naturally being greedy or short-sighted, and in cases where individuals *are* able to make optimal environmental choices, governmental regulation can be a hindrance rather than a help. Another limitation of governmental regulation is that it works best when it is in accordance with the beliefs of those being regulated. The majority of citizens

must *already* agree with the regulations in question; there are not enough enforcement officers to compel all the people all the time. Thus, although governmental is important in regulating in behavior, it does have significant limitations.

The third factor that influences behavior involves personal standards. Although much work has been done in developing moral values (e.g., creating consistent, workable, and applicable environmental ethic), there has been less attention focused on the transition from moral attitudes to moral conduct. While moral education is important in developing a system of values that facilitates sustainable decision making, it is not enough to ensure that individuals will act in a sustainable manner. Even with a strong sense of personal values, people may still act in hypocritical ways, transgressing their own personal moral standards. One of the reasons for this behavior is that social structures enable individuals to eschew the feeling of responsibility for their actions. By creating scenarios where the consequences of our actions can be minimized, displaced, or otherwise ignored, our social and cultural contexts allow responsible persons to act in irresponsible ways. Thus, a third factor to be addressed in regards to behavior is in the transition from moral thought to moral action.

While it has been recognized that behavior is an important factor in achieving sustainability, the majority of energy is focused on social/environmental influence, specifically governmental regulation. In order to achieve optimal behavior, all three factors affecting behavior, self-efficacy, social/environmental influences, and internal moral standards, must be looked at and addressed.

Attention must be shifted towards personal efficacy and especially the transition of moral attitude to conduct before there can be any realistic shift in changes of behavior.

CHAPTER 1

SELF-EFFICACY

The first factor that strongly affects behavior is the feeling of personal influence. The sustainable society depends on individuals making the appropriate decisions in their public as well as private life. Yet, many individuals do not feel that their actions make a significant difference. One of the problems that can result from this feeling of inefficacy is that individuals may begin relying on outside forces to help them behave in ways consistent with their values; they feel little responsibility for environmental problems when it appears that their contribution is very minor. Consider for example the following section taken from Mark Sagoff's *The Economy of the Earth*:

> Like [my students] and like members of the public generally, I, too, have divided preferences or conflicting "preference maps." Last year, I bribed a judge to fix a couple of traffic tickets, and I was glad to do so because I saved my license. Yet, at election time, I helped to vote the corrupt judge out of office. I speed on the highway; yet I want the police to enforce laws against speeding. I used to buy mixers in returnable bottles – but who can bother to return them? I buy only disposable now, but to soothe my conscience, I urge my state senator to outlaw one-way containers.
>
> I love my car; I hate the bus. Yet I vote for candidates who promise to tax gasoline to pay for public transportation. . . . The political causes I support seem to have little or no basis in my interests as a consumer, because I take different points of view when I vote and when I shop. I have an "Ecology Now" sticker on a car that drips oil everywhere it is parked.[9]

[9] Mark Sagoff, *The Economy of the Earth: Philosophy, Law, and the Environment* (Cambridge and New York: Cambridge University Press, 1988). pp. 52–53.

In this passage, Sagoff is showing that we behave differently *qua* consumers than we do *qua* citizens. Yet, he is also revealing the way in which individuals have come to rely on governmental coercion to enforce their personal behavior. The problem with relying on the government as a motivator for one's personal values is that it is often too little and too late. Being composed of multiple ideologies, the government is usually able to only pass regulations that has been watered-down due to compromise and that comes significantly later than needed. The Endangered Species Act was passed in 1973, *after* the Bald Eagle, grizzly bear, peregrine falcon, whooping crane, and other species were perilously close to facing extinction. If everyone had waited until the government had stepped in to regulate endangered species, it is unlikely any of those species would still exist today.

Of course, it is not just that regulation is too little, too late; sometimes it doesn't come at all. Sagoff wishes his senator would outlaw one-way containers so that he will be more motivated to use returnable bottles, but the likelihood of disposables being outlawed any time soon is not great. So when the individual feels that their individual actions do not amount to anything, they can actually work against the very goals they desire. Sagoff presumably wants to get rid of one-way containers because he would like to curb landfills, pollution, and energy consumption; and yet by his own actions he further exacerbates the problems he would like to see solved.

In order to achieve a sustainable society then, it is necessary for the individual to realize the importance of their actions so that environmental

problems can be addressed rapidly and fully. Yet, many environmentalists feel completely overwhelmed when discussing environmental problems. This is not an unreasonable concern; in a world comprised of more than six-billion people, one starts to wonder just how much effect a single person can have. The doubt of one's influence can be seen in terms of two questions. First, do individual actions make any difference at all? Assuming that individual actions do make *some* difference, the second question comes in terms of impact. Does an individual's impact make *enough* of a difference to matter in the face of actions taken by enormous and influential actors like governments and corporations?

Refuting the Argument that Individual Actions are Futile

To look at these questions in better detail, we can refer to the work of J. Baird Callicott who argues that individual responsibility is futile in environmental ethics. Early in his career, Callicott attempted to set a practical example of environmental ethics by living a sustainable lifestyle: riding his bike instead of driving, growing his own food, and collecting his own fuel wood (among other things). Yet, in the end he felt these actions were an impractical route to securing sustainability. As he writes,

> Meanwhile, the U.S. economy kept growing and most everyone else went on consuming fossil fuels — limited, if at all, only by the formation of OPEC, not conscience. Industrial agriculture expanded. Shopping malls sprang up in erstwhile hayfields and wetlands just as they did all over North America from coast to coast and from Canada to Mexico. And adding insult to injury, while I was trying to live, to practice an environmental ethic at a considerable cost of time and effort, to say nothing of money, my colleagues in the field at other universities were

> publishing papers, attending conferences, and getting ahead professionally. When the man who believed trees caused pollution was elected president of the United States in 1980, I decided that it was high time to reassess my strategy for infusing an environmental ethic at the practical level.[10]

Callicott here persuasively describes the problem many environmentalists face. To live a green lifestyle (assuming it is possible) is costly, takes considerable time and energy, is severely limiting, and is often incompatible with many desired professions (try being an academic now a days while living off the grid). Furthermore, with increased globalization, access to resources and the democratization of a consumer-driven lifestyle, our individual efforts can seem like just a drop in the ocean of ecological problems. As Callicott puts it, "the incremental approach — you change, I change, the next person changes, and after a while we all will have changed our behavior — seems futile."[11] Indeed, Callicott argues that there is a *substantive* difference between the ethical domain that encompasses environmental ethics and the domain that houses other sorts of ethics such as animal rights or anti-abortionism. The former is *holistic* while the latter is *individualistic*.

> Each ethically motivated decision to eschew abortion and carry to term an unplanned and unwelcome pregnancy saves the life of the precious human fetus. Each ethically motivated decision to eschew the purchase of a fur coat saves the skins of a score or more individually precious minks. Each person who refuses to engage in lethal combat may save the life of another precious person. . . . If a single human life is saved, or a single fetus is allowed to be born, or a single animal is spared suffering and

[10] J. Baird Callicott, *Beyond the Land Ethic* (New York: SUNY Press, 1999), pp. 45-58. This article originally appeared in *Ethics and the Environment* 9 (1996): 3-14.
[11] Ibid., p. 49

> premature death, then one's self-imposed, morally motivated limitation on freedom of action will not have been in vain. But environmental ethics concerns populations of animals and plants, species, ecosystems, and the biosphere as a whole. No purely personal practice of environmental ethics that I undertook or any that I could have undertaken would have prevented global warming or soil erosion or species extinction. For any significant environmental benefits to occur our whole society and culture will have to undertake fundamental structural changes.[12]

Callicott is arguing that due to the very nature of environmental problems, the effects of individual actions are so severely diminished as to be utterly futile. One may choose to sell his or her car and walk for the rest of their days, but if no one else does likewise, it certainly won't stop global warming. This kind of example makes it clear why environmentalists might focus largely on group change, whereas proponents of other ethical domains (as Callicott phrases it) would focus on individual responsibility; individual actions are ineffectual for achieving environmental sustainability.[13] Callicott claims that, unlike the animal rights activist who makes a difference every time he or she chooses hummus over liver pâté (by saving an animal life), an environmentalist only makes a real difference when he or she votes, lobbies, or does something else to change the political compass of the great ship of state and its constituents.[14] The implication is that individual actions are essentially useless in terms of environmental solutions because they are individually negligible.

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[12] Ibid., pp. 47-48.

[13] And Callicott is not alone here. In 2004, the Sierra Club spent 63 percent (about 28.8 million dollars) of its programs budget on "Studying and influencing public policy" while only 17 percent (7.9 million) went to "information and education." Statistics compiled by the Better Business Bureau; available at http://charityreports.give.org/Public/Report.aspx?CharityID=1330.

[14] Callicott sees "the political implementation of environmental ethics" as the "the only implementation that can make a significant practical difference." *Beyond the Land Ethic*, p. 51

If taken literally, Callicott is claiming that nothing we do as individuals either helps or hinders environmental problems. Those who agree with this view may be labeled *collective-action environmentalists* because they see group actions as the only way to bring about change; individual actions are considered quite futile because they are merely a drop in the bucket. Yet, *prima facie* this view seems very mistaken. Collective-action environmentalists may not grow all their own food but surely they recycle. If organically grown produce were the same price as conventional, surely they would purchase pesticide-free crops over the alternative, and not simply for health reasons. In fact, collective-action environmentalists may even go so far as to avoid the ever-trendy SUV as a form of transportation because of both high gas prices *and* global warming. But why do any of things if our actions truly make *no difference*?

First and foremost, they do so because our individual actions *do* have very real effects on ourselves and the rest of the world. While group impact may be altogether larger, this does not mean that individual impact is negligible. Even the act of switching on a light bulb has a number of very real, concrete effects. There is a direct connection between the energy that lights my house and the burning of coal to produce the electricity that the light requires. Furthermore, there is a direct physical connection between the energy that lights my house and the entire infrastructure through which electricity is conceived. Consequently, when electricity is not used at my house, this stoppage also has a very real, concrete effect on the world, even if it is a minor one, all things considered. Every pound of

carbon not used in one's daily routine is just that, a pound of carbon not emitted into the atmosphere.

Because individual actions, especially environmentally sensitive ones are often seen as isolated, ahistorical incidents, distinct from one another and the world at large, it is easy to view our actions as minimal at most. But seeing individual actions within a temporal context, the depth and profundity of one's lifestyle becomes clearer. For example, in the PBS spoof documentary *Affluenza,* one of the characters decides to take inventory of the amount of waste his family produces in a year and the results are disconcerting. By the end of the year his five-person family has managed to fill an entire dumpster with waste. Anecdotal stories aside, statistical research also illuminate how much impact an individual can have. According to the Environmental Protection Agency (EPA) the average household in Falls Church, Virginia (with average household being about two people) puts out around twelve and a half pounds of waste *per day*. In Chatham, New York, it is almost *sixteen* pounds per household per day — about two and a half people per household leave six and a half pounds *per person*.[15] Surely six plus pounds of waste per day must qualify as significant.

Moreover it is not just in terms of garbage that individual actions can produce surprisingly strong results. As another example, homes that install a solar thermal system to heat their water reduce carbon dioxide emissions by

[15] Environmental Protection Agency, "Cutting the Waste Stream in Half: Community Record-Setters Show How" (1999). http://www.epa.gov/epaoswer/non-hw/reduce/r99013.pdf.

about 720 pounds annually.[16] Although there is no clear line demarcating negligible environmental impacts from actual environmental impacts, one would be hard-pressed to argue that a dumpster of stuff a year, stuff made up of individual items, each bringing with them their own history of resource and energy use, can be dismissed as a "drop in the bucket." Indeed, this point was not lost on Aldo Leopold, the grandfather of environmental ethics:

> There is lacking only a simple formula by which we, and posterity, may act to make America a permanent institution instead of a trial balloon. The formula is: learn how to tell good land-use from bad. Use your land accordingly, and refuse aid and comfort to those who do not.
>
> Isn't this more to the point than merely voting, petitioning, and writing checks for bigger and better bureaus, in order that our responsibilities may be laid in bigger and better laps.
>
> . . .
>
> Nearly all American wheat is the product of exploitation. Behind your breakfast toast is the burning strawstacks, feeding the air with nitrogen belonging in the soil. Behind your birthday cake is the eroding Palouse, the over-wheated praires, feeding the rivers with silt for army engineers to push around with dredge and shovel, at your expense; for irrigation engineers to fill their dams with, at the expense of the future. Behind each loaf of (inedible) baker's bread is the "ever normal" granary, the roar of the combine, the swish of the gang plow, ravaging the land they were built to feed, because it is cheaper to raise wheat by exploitation than by honest farming. It wouldn't be cheaper if exploitation wheat lacked market. You are the market, but transportation has robbed you of all power to discriminate. If you want conservation wheat, you will have to raise it yourself.[17]

[16] Environmental Protection Agency, "What You Can do to Slow Global Warming" (2000). http://yosemite.epa.gov/oar/globalwarming.nsf/UniqueKeyLookup/SHSU5BWJNZ/$File/whatyoucandotoslowgw.pdf.

[17] Aldo Leopold, *The River of the Mother of God: And Other Essays by Aldo Leopold*, eds. Susan L. Flader and J. Baird Callicott (Wisconsin: University of Wisconsin Press, 1992). pp. 296-97

As Leopold points out, what has been mentioned thus far is only half the story. Besides the direct physical impact that comes from individual actions (pounds of waste), one must also take into account direct effects in terms of economic and cultural orientation — after all, "you are the market." While the extent to which consumer preferences dictate the market (as opposed to the market dictating consumer preferences) is debatable, it is clear that there *is* influence. One of the more prominent examples has been the increasing trend towards organic foods. Virtually absent from all major grocery stores five years ago, organic produce is now being sold at Wal-Mart, the world's largest retail store.[18] There has been a shift to local foods as well, as consumers' preferences have shifted to edibles that don't travel half way across the world to reach their plate. An article in the *New York Times* highlights the influence conscionable consumers have, noting that they "will influence mainstream shoppers, since the typical consumer has neither the time nor the inclination to untangle the politics of a supply chain when they are buying milk or a loaf of bread."[19] On a global level, preferences in consumer tastes dictate a type of environmental ethic. A recent report on China's economic development found many small, independent companies in that country adopting high environmental standards to fill the demands of niche markets across the U.S. and Europe.[20] Many successful have

[18] Michael Pollan, "Mass Natural," *New York Times Magazine*, 4 June 2006, p. 15.
[19] Kim Severson, "Why Roots Matter More," *New York Times*, 15 November 2006, National Edition, Small Business, p. 1. For the shift in local foods, see "Organic Apple? Check. But Is It Local?" Narr. Kathy Witkowsky. *All Things Considered*. National Public Radio, KERA, 4 August, 2006.
[20] "China's Environment: Paying for Prosperity — Part Three: Exporting Goods, Importing Standards" Narr. Mary Kay Magistad, *The World*. Public Radio International, 19 July, 2006.

tailored products in terms of individual preferences and not necessarily group preferences.

Absolute versus Discrimination Thresholds

So the answer as to whether individual actions have impact is a straightforward one. Not only do individual actions have an impact but, depending on what problem one is attempting to solve, they can have a significant impact. Possibly the reason Callicott and others see individual actions as futile is because they are viewing them in terms of absolutes rather than degrees. Jonathon Glover's article on collective and individual responsibility is helpful in better understanding this distinction. Glover refers to an *absolute threshold* where there is a sharp boundary between two different outcomes. If one's act does not result in this threshold being crossed, that act has contributed nothing to the outcome: the event is all-or-nothing. The other type is a *discrimination threshold*, those situations where an individual's action will push a situation farther in a particular direction; this effort, though real, will be unnoticed because its effects will be distributed throughout society.[21]

Environmental problems may be best understood in terms of discrimination thresholds, because they are rarely all-or-nothing affairs. Pollution, for example, works in degrees as does habitat and species loss, genetic homogenization, and general ecosystem disruption. Yet simply showing that environmental problems generally fall under discrimination-type thresholds may

[21] Jonathan Glover, "It Makes No Difference Whether or Not I Do It: Part 1," *Aristotelian Society: Supplementary Volume* (1975): pp. 171-190.

not be enough to convince someone that individual actions make a difference. They may feel that even if an action does have some affect, it will not be a *significant* one. As Barton H. Thompson argues, most people feel that their "individual decisions will have only a marginal impact on the health of the resource; unlike unilateral voluntary actions, the adoption of a universal solution can save the resource."[22] Glover argues something similar, that actions that fall within the discrimination threshold *only* make a difference when they are *combined*. If it is highly unlikely that individual actions will combine to create a significant difference, then, Glover argues, it makes no difference whether someone performs the action or not.

One of the problems with this sort of argument is that it is contingent on what constitutes a *significant difference* and that in turn is dependent on contextual elements like ecological factors, individual values, side effects and so on. The more difficult it is too see what is significant, the more difficult it is to argue that one's individual actions don't make a difference. For example, suppose I apply heavy doses of chemical fertilizers and herbicides to my lawn so that it runs off into the pond behind my house. Suppose further that though there are not enough poisons and fertilizer to completely deaden the ecosystem of the pond, there is enough to create a relatively small area of disturbance (hypoxia, for example) near my lawn. Does this disturbance constitute a significant change? How large of an area needs to be affected in order to constitute significant change? Would it be significant if the pond were only two hundred feet

[22] Barton H. Thompson, Jr., "Tragically Difficult: The Obstacles to Governing the Commons," *Environmental Law (Northwestern School of Law)* 30, no. 2 (2000): 241-278. Quote taken from pp. 245-46.

in circumference? What if it was the ocean? The answer to this question lies partly in ecological knowledge, such as how much the ecosystem can absorb before it becomes unstable, what sort of flora and fauna currently exist in the pond, how these flora and fauna will be affected by run-off, to what extent will the hypoxia in my pond affect other ecosystems, etc. The other part of what will constitute a significant change depends on world view; ecological factors must be couched in some sort of value framework before they can have any meaning. If the last remaining individuals of an endangered species exist solely within my pond, then the significance of my actions may change dramatically. Thus, in the end, does the individual's action of dosing their lawn make a difference?

Of course, the difficulty of determining what is significant is further exacerbated when considering possible side effects. For example, when considering the environmental impact of coal, gasoline, and other fossil fuels, discussion tends to center on global warming; yet, there are a thousand other consequences from cutting emissions: cleaner air, cleaner waters, fossil fuel independence, and so on. Furthermore, greenhouse gases have a history long before they reach the atmosphere: they are extracted using mountaintop removal, off-shore drilling, wildlife disruption, toxic processing, and so on. They require geopolitical strategies that wreck struggling nations, prop up dictators and wage war. Questions of the significance of an action are further obscured when considering *all* the possible consequences of an action — individual use may not stop global warming, but it may help to clean local air.

A final difficulty in determining significance is the problem of being able to predict the likeliness that one's actions will or will not combine with others to create an outcome. Predictions of this kind become especially difficult when considering multiple variables such as time, or the likelihood of others' participation, or the influence on others' decision making. Consider an ethical domain which would have an easily identifiable level of significance of: animal rights. Because animals are individuals (and, if one is an animal right's activist, each animal's life is significant), our individual actions will make a difference concerning their welfare. As Callicott points out, each ethically motivated decision to avoid purchasing a fur coat saves the lives of a dozen or more individually precious minks. But the purchasing of fur coats is a rarity in our day-to-day dealings with animals; in most cases, the slaughter of an animal requires more than one consumer. Each ethically motivated decision to eschew, say, a hamburger, does *not* in fact save an individual. It takes a lot of people to eat a cow; indeed, it takes an entire group. The same is true in the case of many other problems that animal rights activists address. The shunning of such commodities as leather and gelatin (the latter is made from ground up animal bones), or the avoidance of milk and eggs (which strict vegetarians do) does not save an individual. Maybe the reason it is still rational for a vegetarian to avoid hamburgers (even though an individual is not saved in the act) is because the discrimination threshold is lower, i.e., it takes only ten people to quit eating steak to save a cow's life. But this possibility points to the enormous complications in

this sort of reasoning. If environmental problems are best understood in terms of discrimination thresholds, it is difficult to shrug off the import of individual actions.

Another way of exploring the importance of individual action is supplied by political theorist Anthony Downs who argues that voters have little incentive to vote because they cannot expect to have any impact on the outcome of a given political election.[23] Russell Hardin elaborates on this point:

> In the New Hampshire election for the United States Senate in 1974, Louis Wyman and John Durkin were virtually tied at about 111,000 votes each . . . . Eventually the US Senate declared the election undecidedable and declined to seat either candidate. The vote was then retaken in a special election . . . . This odd election shows that merely for practical reasons of the impossibility of counting votes accurately, one more vote is unlikely to make a difference in an election even in as small a polity — less than a quarter of a million voters — as New Hampshire, one of the smallest states in the United States. The individual voter essentially does not count. An editorial response to the presidential vote-counting in Florida in 2000 was to lecture citizens with the claim that one's vote does count after all. The more plausible inference from that debacle is that one's vote clearly could *not* have counted because it was swamped by the margin of error.[24]

Indeed, it can be extremely difficult to argue that voting is of any importance at all, though it is often believed to be one of the single most important things one does (politically speaking). Often collective-action oriented environmentalists who feel that individual actions do not matter are steadfast in their belief that voting *does* matter. This is not to say that voting is or is not important; it is only to show the further difficulty in assessing the significance of an action.

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[23] Anthony Downs, *An Economic Theory of Democracy* (New York: Harper, 1957).
[24] Russell Hardin, "Street-Level Epistemology and Democratic Participation," *The Journal of Political Philosophy* 10 (2002): p. 220; (emphasis added).

In the end, then, one can only say that individual actions working towards a discrimination threshold are unimportant *only* when they know fully the contextual and temporal consequences of their actions, including side effects, and further, that the actions would not be combined to create a significant change. Although philosophers do their best to put ethical judgments into nicely packaged, disparate boxes, real-world scenarios rarely fit into categories accessible to this sort of calculus. Even when it is actually the case that individual actions will not combine to create a significant outcome, determining these sorts of scenarios is extremely difficult. Instead of wondering what the chances of causing (or preventing) harm are possible under a given scenario *x*, it may be easier in most cases simply to assume that individual actions *do* have an effect and that these effects should be considered *significant*.

Even in cases where one knows with certainty that their individual actions will not make a significant difference, it may still be important whether or not they are performed. Thus far, significance has been understood solely in terms of the consequences of an action but it can be understood in a broader context. There is a karmic aspect of individual actions which should be considered when making judgments of actions, whatever their extrinsic outcome. That actions play a role in shaping one's character and consequently one's moral judgment is not an uncommon theme in western philosophy. Both Kant and Aquinas argue that one's treatment towards animals affects one's character and is reflected in how one treats people. Thus, although kicking a dog may be an inconsequential act, it enhances a disposition to act cruelly towards others. Even if one's actions won't

create external consequences, they may have a strong internal effect leading to eventual hardening of character, erosion of empathy, and ultimately a shift in moral judgment. It is well known that individuals can be conditioned to accept abnormally high levels of brutality due to routine exposure of violence and killing. Indeed, eighteenth-century England forbade butchers or doctors from sitting on juries because they were too accustomed to the sight of death.[25] More recent examples come readily from war and can be seen in such atrocities as the *Mai Lai Massacre*. One may argue that there is a world of difference between the suburbanite fertilizing his lawn and the massacre of innocent civilians. But the general point is the same; our actions shape our attitudes in important ways. Even if turning off the water while brushing one's teeth will not stop the impending global water crisis, it does foster an ethic and an attitude for positively engaging in those occasions that *do* make a difference. Thus, even if it can be shown that individual actions will not be combined with other actions to create significant change, it does not follow that they should be taken as insignificant and consequently ignored.

Conclusion

One of the factors that strongly influences personal behavior is the belief that one has control over the outcome of a situation. Without such a belief, individuals are less likely to engage in pro-active behavior and are inhibited from developing a sense of responsibility associated with their actions. Consequently, they are more likely to rely on others to coerce them into behaving in ways

[25] This point is reported by Kant in his *Lectures on Ethics*.

consistent with their values and may even act in ways counter productive to their own goals. In the environmental arena, it is often argued that individuals have little or no impact on environmental problems. But this assumption is clearly mistaken; that individual actions have an impact is clear because it can be measured in gallons, pounds, and tons. This point can become especially clear when individual actions are put in a temporal context, where accumulation of effects is more obviously significant. Even when one's individual actions taken alone are not enough to create *significant* change (however defined), they may be combined with the actions of others to create a critical mass. However, occasions arise where individual actions need to be combined with others' in order to be significant *and* it is obvious that the others will *not* be participating. Although individual actions will not lead to significant events, it still does not follow that they are *eo ipso* insignificant. While in this section I have attempted to show that the individual does influence the outcomes of important environmental problems, it should also be noted that an individual's habits shape further patterns of behavior. Thus, there can be significance in acting, even if one is unable to affect the outcome of an event. This awareness and reaffirmation of individual power and influence over environmental problems is one of the first steps in creating behavior patterns consistent with a sustainable society. An environmental ethic, if it is to contribute to sustainable living, must emphasize self-efficacy and personal responsibility.

CHAPTER 2

ENVIRONMENTAL AND SOCIAL INFLUENCES

The second factor that strongly influences behavior involves environmental and social influences. While environmental and social influences come from a variety of sources, one of the most powerful sources of environmental influence comes from governmental coercion. If environmental problems can be traced to poor choice making on the part of the individual, then a reasonable solution is for the development of social regulation that strongly dictates personal decision-making. Indeed, governmental regulation as a solution to environmental problems has been suggested in the writings of a large number of seminal environmental philosophers: Mark Sagoff, Bryan Norton, J. Baird Callicott, Aldo Leopold, and Holmes Rolston, III, to name a few[26] The call for this sort of solution does not fall on the humanities alone, it is echoed as strongly by many of the most important ecological and biological scientists working on behalf of a sustainable future.[27]

To see why this solution is so appealing, it is helpful to look back at the arguments of one of its earliest proponents, Thomas Hobbes, and his

[26] For example, see Sagoff, *The Economy of the Earth*; Bryan G. Norton*, Toward a Unity among Environmentalists* (New York: Oxford University Press, 1991); J. Baird Callicott, *Beyond the Land Ethic*; Aldo Leopold, *A Sand County Almanac* (New York: Ballantine Books, 1949); Holmes Rolston, III, *Environmental Ethics: Duties to and Values in The Natural World* (Philadelphia: Temple University, 1988). The same can also be said for more contemporary philosophers like Erik Katz and Andrew Light, eds. *Environmental Pragmatism* (New York: Routledge, 1996), and Robert Frodeman, "The Policy Turn in Environmental Ethics," *Environmental Ethics* 28 (2006): 3-20.

[27] See for example Jane Lubchenco, "Entering the Century of the Environment: A New Social Contract for Science," *Science* 279 (1998): 491-97, and Margaret A. Palmer et al., "Ecological Science and Sustainability for the 21st Century," *Frontiers in Ecology and the Environment* 3 no. 1 (2005): 4-11.

assumption that human nature requires outside coercion in order to properly flourish. Alhough Hobbes' argument was formulated centuries before dominant Western thought considered environmental concern a priority, the structure of his thought was reanimated with an environmental twist in the late 1960s by Garret Hardin's analysis of environmental problems.[28] Because the argument relies on assumptions that still hold sway today, e.g., the inherently flawed character of all humans, it still resonates with a number if people. Yet, it has a number of problems, both theoretically and empirically, and a thorough examination reveals that government regulation at times hinders the very problems government sets out to solve.

Hobbes and Leviathan

The best way to understand Hobbes is through his modernist emphasis on human nature. Hobbes concluded that the conditions of human nature are such that they operate to everyone's best advantage when our natural inclinations are stymied under the hand of an external enforcer. In his influential work, *Leviathan*, Hobbes argues that humankind's natural proclivity for competition, diffidence, and glory, as well as the scarcity of resources, leads us inevitably towards a state of war. To show why, Hobbes invites us to consider a world where there are no recognized sources of legal authority. What would this world be like? Because Hobbes assumes that humans are inherently competitive, diffident, and glory-seeking, this world would be one of continual warfare, waged in order to protect our holdings or take from others what we need. Even if only a minority were to

[28] Garret Hardin, "The Tragedy of the Commons," *Science* 162 (1968): 1243-48.

act in this fashion, everyone would be forced to take defensive measures due to fear of attack and might even feel impelled to use preemptive attacks against potentially aggressive neighbors. As a result, Hobbes argues, this world would be one of pure chaos and manifold in misery, a life of loneliness, despair, and constant threat; a world where even the worst moral transgression would go unpunished.[29] Worst of all, there would be no drive for achievement or the bettering of one's condition, for, Hobbes thinks, any project invested in could and probably would simply be taken by those with greater power.

> In such a condition there is no place for industry, because the fruit thereof is uncertain, and consequently, no culture of the earth, no navigation, nor use of commodities that may be imported by sea, no commodious building, no instruments of moving and removing such things as require much force, no knowledge of the face of the earth, no account of time, no arts, no letters, no society, and which is worst of all, continual fear and danger of violent death, and the life of man, solitary, poor, nasty, brutish, and short.[30]

The solution to this condition, which, according to Hobbes, reason dictates, is that individuals create a social contract wherein we choose to limit our actions on the agreement that others do so as well. Although this contract limits one's actions, this limitation ultimately leads to a more desirable state of affairs. But in order to make this contract successful, Hobbes argues, it must be enhanced by the threat of sanction through an individual or group endowed with

[29] This is because anything is justified in self-defense: "The Right of Nature, which writers commonly call *jus naturale*, is the liberty each man hath to use his own power … for the preservation of his own nature … and consequently of doing anything which, in his own judgment and reason, he shall conceive to be the aptest means thereunto." Thomas Hobbes, *Leviathan*, ed. and trans. by Edwin Curley (Indianapolis, Ind. Hackett, 1994), p. 79.
[30] Ibid., p. 76.

the power of force because "Covenants without the sword are but words, and of no strength to secure man at all."[31] Thus, Hobbes concludes that governmental coercion is necessary for mitigating innately uncooperative human tendencies by means of a guaranteed social contract.

Hardin's Revision

In the late 1960s, Garret Hardin explicated what he thought was the primary cause for environmental degradation in a famous essay that one of the primary causes of environmental degradation, rapid human population growth, was due to what he called "The Tragedy of the Commons."[32] The commons Hardin refers to are resources which are either owned by no one, or jointly by everyone in a given area, but are available to all users free of charge (contemporarily referred to as common-pool resources or CPRs). The tragedy of the commons is that in a commons setting, individuals are able to use resources without bearing the full brunt of the consequences, and that it becomes rational for an individual to over-exploit a given area because s/he receives the full benefits of overuse while *everyone* pay for the consequences.

To illustrate this idea, consider the contemporary and painfully real problem of overfishing.[33] Currently, much of the oceans are prime examples of

[31] Ibid., p. 106.
[32] Garret Hardin, "Tragedy of the Commons," *Science* 162 (1968): 1243-48.
[33] It is worth noting that there is a bit of historical inaccuracy generally surrounding explanations of the tragedy of the commons. Typical illustrations (such as Hardin's) involve a pasture open to all who wish to graze cattle. This scene implicitly harkens back to grazing policies in medieval and post-medieval England. In fact, Hardin's later writings allude to the eighteenth century English Enclosure acts to explain how the tragedy of the commons might be resolved ("Denial and Disguise," in Garret Hardin and John Baden, eds., *Managing the Commons* [San Francisco: Freeman, 1977], pp. 45-52.) But, as Susan Jane Buck Cox has documented the idea of a

commons (owned by no one) and the overuse of these commons is having increasingly tragic effects.[34] Those who can access the resources in this commons will seek to maximize personal gain. For example, fishers will each ask the question, "What is the utility *to me* of adding one more fish to my catch?" The answer is obvious; since the fisher receives all of the proceeds from the sale of each fish he or she catches, the gain is high. At the same time, because the effects of overfishing are born by all the fishers, the negative consequences are seemingly only a fraction of the positive consequences. As Hardin writes,

> Adding together the component partial utilities, the rational herdsman concludes that the only sensible course for him to pursue is to add another animal to his herd. And another; and another. . . , But this is the conclusion reached by each and every rational herdsman sharing a commons. Therein is the tragedy. Each man is locked into a system that compels him to increase his herd without limit — in a world that is limited.[35]

In scenarios of small communities that regulate themselves, or where there are few users employing low-impact technologies, it may be possible for each individual to take what they like without exceeding the replacement rate of renewable resources such as fish. But in modern day scenarios, where there are many users are coupled with high-impact technologies, the logic of the commons

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commons in medieval England was significantly different than the current notion of a commons; and policy surrounding the traditional commons system was in fact successful in preventing Hardin's tragedy of the commons. See Susan Jane Buck Cox, "No Tragedy of the Commons," *Environmental Ethics* 7 (1985): 49-61.

[34] For specific problems concerning overfishing see Jeremy Jackson, "Brave New Ocean," keynote address delivered at Diversitas Open Science Conference, Oaxaca, Mexico, 11 November 2005 and Carl Safina, *Song for the Blue Ocean: Encounters Along the World's Coasts and Beneath the Seas* (New York: Henry Holt and Company, 1998).

[35] Hardin, "The Tragedy of the Commons," p. 1244.

is a terrifying prospect. The level of sustainable yield is forgotten, ignored or simply disbelieved by the individual who can gain positive benefits from over-exploiting the commons.

Like Hobbes, Hardin sees social problems stemming directly from scarcity of resources and human nature. In each scenario, Hobbes' state of nature and Hardin's tragedy of the commons, the rational course for the individual leads to counterproductive ends in the group setting. Also, like Hobbes' state of nature, the tragedy of the commons can be seen in terms of enforcing contracts. For Hobbes, the state of nature leads to perpetual warfare of all against all because there is no guarantee that any contract that is made will be kept. This concern is especially important because *all* participants must agree in order for the contract to work; if only some lay down their arms they are at the mercy of those who do not. Similarly, the only way to solve the tragedy of the commons is for all involved to restrain from exploiting the commons, and more specifically, to regulate the number of children that each family can have. So asks Hardin, how do we legislate temperance? "Experience indicates that it can be accomplished best through the mediation of administrative law . . . through mutual coercion mutually agreed upon by the majority of people affected".[36]

The Question of Human Nature

Both Hobbes and Hardin lay out reasons why they feel governmental regulation is necessary for creating a stable (and in Hardin's case sustainable)

[36] Ibid., pp. 1246-47. The necessity of governmental regulation in achieving sustainability has been most strongly argued by William Ophuls, "Leviathan or Oblivion?" in *Toward a Steady-State Economy,* ed. Herman E. Daly (San Francisco: W.H. Freeman and Company, 1973), pp. 215-30.

society. Human nature, being inherently competitive and self-interested, becomes socially counterproductive in scenarios where desirable resources are limited and ungoverned. We cannot trust others to keep their word and so without governmental regulation, we are led inexorably towards the complete despoliation of the natural world. But is this necessarily true? Since Hobbes' original formulation of this argument, there have been a number of criticisms launched against it, starting with the question of human nature. One problem of the argument for governmental regulation is that it turns on the modernist assumption that there is a fundamental human nature and that it is selfish, competitive and anti-social. This assumption is problematic for a couple of reasons. First, it is not clear that there is a single set of characterizations of human nature which aptly describes all people in all places. To claim that there is supposes a hubris it would be best to avoid. Second, even if one accepts the universality of human nature (or at least the universality of human nature within a specific culture) it is not clear why it should be as Hobbes' describes. It is true that individuals do often act selfishly, diffident and so on, but this may be due to the warping influence of culture rather than human nature. Rousseau, for example, argued that humans were basically virtuous creatures corrupted by civilization.

> Above all, let us not conclude with Hobbes that because man has no idea of goodness he is naturally evil; that he is vicious because he does not know virtue; that he always refuses his fellow-men services he does not believe he owes them; nor that, by virtue of right he reasonably claims to things he needs, he foolishly imagines himself to be the sole proprietor of the whole universe. Reasoning upon the principles he establishes, this

> author ought to have said that since the state of nature is that in which care of our self-preservation is the least prejudicial to the self-preservation of others, that state was consequently the best suited to peace and the most appropriate for the human race. He says precisely the opposite, because of having improperly included in the savage man's care of self-preservation the need to satisfy a multitude of passions *which are the product of society and which have made laws necessary*.[37]

Anarchists have also come to challenge Hobbes' assumptions concerning human nature, specifically that people are disinclined to engage in cooperative relationships. Petr Kropotkin, the influential 19th century Russian anarchist argued that cooperation is a fundamental part of nature to be found not only in insects like ants and bees, but also in indigenous tribes and civilized society. In his well known work *Mutual Aid: A Factor of Evolution*, Kropotkin, elaborating on the earlier work of Karl Kessler, argued that "besides the *law of mutual struggle* there is in Nature *the law of mutual aid*, which, for the success of the struggle of life, and especially for the progressive evolution of the species, is far more important than the *law of mutual contest*."[38]

The importance of this debate should not be underestimated. One of the reasons both Hobbes and Hardin falls back on governmental regulation is that human nature requires it. But if Kropotkin's assessment is closer to the truth and humans are inherently cooperative, than governmental coercion would be unnecessary for creating functioning social institutions. In fact, some have

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[37] Jean-Jacques Rousseau, "Discourse on the Origin and Foundations of Inequality Among Men," in *The First and Second Discourses*, ed. and trans. by Roger D. Masters and Judith R. Masters (New York: St. Martin's Press, 1964), pp. 128-29 (emphasis added).

[38] Petr Kropotkin, *Mutual Aid: A Factor in Evolution*, ed. Paul Avrich (New York: New York University Press, 1972), p. 19 (emphasis added). For more information on the anarchist tradition concerning human nature see George Woodcock, "Anarchism: A Historical Introduction," in *The Anarchist Reader*, ed. George Woodcock (London: Fontana, 1983).

argued that governmental coercion may be worse than unnecessary, seeing it as the base for social ills.[39] So how do we know whether government is necessary for optimal social behavior?

The problem of human nature is one that has troubled philosophers for hundreds of years and it is unlikely that anything said here would persuade the reader one way or the other. Happily, the investigation of this paper does not require the final say on human nature, only a reasonable understanding of how humans behave in particular settings. Once human behavior can be predicted in particular conditions we can use that knowledge to develop optimal behavior for sustainability.

Hobbes argues that humans will be in a constant state of strife and turmoil without a sovereign power to regulate and enforce contracts. Hardin argues that humans will continue to exploit the environment without an external power to regulate and enforce sustainable behavior. How do these predictions match up with real-world scenarios? As it turns out, neither are entirely accurate.

Refuting Hobbes

One of the ways Hobbes seeks to bolster his argument is through observational evidence:

[39] As political theorist April Carter explains, if "… men are by nature — when uncorrupted by the perverting influence of government and evil societies — co-operative, peace-loving and activated by spontaneous sympathy towards others, the logic of the situation is also reversed. Government ceases to be a protector of individuals, and a guarantor of their lives and property. Instead, the State is seen as the chief threat to the liberty, security and prosperity of the individual, whom it circumscribes with laws and regulations, jails for infringement of these rules, conscripts to fight wars, executes for any treason to the state, and robs through exorbitant taxes." April Carter, *The Political Theory of Anarchism* (New York: Harper & Row, 1971), p. 16.

> It may peradventure be thought, there was never such a time nor condition of war as this…, But there are many places, where they live so now. For the savage people in many places of *America* (except the government of small families, the concord whereof dependeth on natural lust) have no government at all, and live at this day in that brutish manner as I said before.[40]

Of course, to Hobbes' world, steeped in ethnocentrism and Christian bias, it did appear that the indigenous people living in America were enthralled in a life of constant strife and cultural impoverishment. Yet contemporary studies of indigenous cultures do more to contradict this conclusion than support it.

To briefly recount the brutish manner of living that Hobbes thought was (in Hobbes' terms) the savage people's lot: "In such a condition there is no place for industry, because the fruit thereof is uncertain, and consequently, no culture of the earth, no navigation, nor use of commodities that may be imported by sea, no commodious buildings . . . no arts, no letters, no society. . . ."[41] The Mandan, an indigenous group located in what is present day North Dakota, serve as a striking counter-example to Hobbes argument. Not only were they noted agriculturalists-growing maize, squash, beans and sunflowers in river-bottom garden plots; but they dwelled in large, permanent earthlodges. These lodges, constructed by way of four center support posts and an outer wall of smaller logs, could hold up to thirty or forty people and villages usually had around 120 lodges.[42] Contrary to Hobbes belief, at least one group of indigenous peoples in North America were

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[40] Hobbes, *Leviathan*, p. 77 (emphasis in original).
[41] Cf. note 30.
[42] Barry M. Pritzker, *A Native American Encyclopedia: History, Culture and Peoples* (New York: Oxford University Press, 2000), p. 336, and David Levinson and Timothy J. O'Leary, eds., *Encyclopedia of World Cultures: North America* (New York: G.K. Hall & Co., 1994), vol. 1, p. 214.

well-versed in the "culture of the earth" as well as the "construction of commodious buildings." Furthermore, Mandan villages from prehistoric times were focal points for trade in the region and became centers of commerce during the 19th century, with steamboats traveling on the upper Missouri regularly docking in their territory. Thus, even Hobbes claim that they would have no use of commodities by sea is flawed, at least in regards to the Mandan as well as other tribes living in that area like the Assiniboine, Cree, Arikara, and Crow. As for the lack of society, depending on how Hobbes is to be interpreted, this claim is either too outlandish to take seriously or simply another misjudgment of the rich Amerindian culture found throughout the continent. The Mandan culture was abundant with ceremonies for such things as success in wartime and healthy crops and they are noted for an especially elaborate ceremony known as the Okipa; a four-day event which reenacted the creation of the earth and tested the strength of the warriors.[43]

The Mandan provide an excellent counterexample to Hobbes' claim that the "savage people in America" had no place for industry. But the question of Hobbes' ethnocentrism is beside the point. After all, Hobbes' claim was two-fold: that the indigenous populations lacked industry as well as *government* and that one was a necessary condition for the other. Yet, the early Mandan, who exemplify the civilized traits that Hobbes so strongly associated with government, were organized in a political system much closer to anarchism than any true form of government. As described by North American anthropologists, Mandan social structure was "under normal social circumstances . . . . regulated by tradition,

[43] Levinson, *Encyclopedia of World Cultures*, pp. 213-15.

and bad luck would come to anyone who broke form tradition. When necessary, pressure was exerted by the family and clan."[44] It was only for ceremonial occasions that a group of select individuals acted as police. This form of coercion may be reasonably understood as a mixture of what anthropologist Harold Barclay calls *diffuse* and *religious sanctions*; the former being sanctions spontaneously applied by any one or more members of the community and the latter involving the supernatural (i.e. bad luck following the breaking of tradition).[45] These forms of coercion are strikingly different from governmental coercion, where the state both creates and enforces laws. Although Mandan communities participated in elections and acknowledged authority figures, these leaders were unable to force others to obey their decisions and instead had to rely on oratorical skills and general charisma to convince others to follow them.[46]

Thus, the Mandan provide an example of successful social organization (if one defines success by Hobbes' standards, i.e., culture of the earth, commodious buildings, etc.) without governmental regulation. As it turns out, the Mandan are not unique in their accomplishments; there are a number of groups classifiable as "anarchic" that have been highly developed in terms of language and culture.[47] Given current evolutionary knowledge though, it should not be surprising that governmental coercion is unnecessary for societies to flourish. Indeed, it is likely that any political structure that required more than rudimentary

[44] Ibid.
[45] Harold Barclay, *People without Government* (Great Britain: Kahn & Averill, 1982): pp. 24-25.
[46] Levinson, *Encyclopedia of World Cultures*, p. 215
[43] See Barclay, *People without Government.* Chapter six looks specifically at agricultural societies that exhibit "anarchic" social organization .

social skills would *have* to had have evolved out of earlier, viable ethical structures. As Callicott has pointed out,

> The social contract theory and its subtler and more palatable descendants, utilitarianism and deontology, were not useful to Darwin because they ground ethics in reason, the most advanced and delicate of animal capacities. From an evolutionary point of view, however, reason could only have emerged in an intensely social environment, complete with a fully articulate language. But the emergence, persistence, and development of such a social environment depends, in turn, on the existence of ethics . . . [48]

In order to achieve the state of evolutionary and cultural development that Hobbes' political organization requires, humans would have *already* needed to function at a reasonably cooperative level. If in a state of nature humans truly did act the way as Hobbes imagined they would, it is unclear how they would have survived to form the sorts of societies in which Hobbes found himself. Thus contrary to Hobbes' prediction, empirical studies and evolutionary logic do not support the claim that those without government must endure perpetual conflict.

Refuting Hardin

What this line of thought shows is not that coercion is unnecessary for the making and keeping of contracts (the Mandan *did* use coercive techniques), but that *governmental* coercion is not a necessary condition. So how does this conclusion relate to the tragedy of the commons? According to Hardin, conscience is self-eliminating where irresponsibility is unrestrained, and

[48] Callicott, *Beyond the Land Ethic*, p. 64. For a lengthy development of this argument, see Matt Ridley, *The Origins of Virtue* (United States: Viking Penguin, 1997).

conscience and guilt are either not strong enough or directed towards the wrong end, creating anxiety rather than proper action. Consequently, Hardin believes we must rely on the powerful coercive force of the government in order to stop the tragedy of the commons.[49] But just as the Mandan were able to use coercive measures different from governmental regulation in developing a flourishing society, individuals in tragedy-of-the-commons-like scenarios are able to use various methods for preventing over-exploitation.

For example, Elinor Ostrom has demonstrated that communication is just as important as government regulation for solving environmental exploitation in a set of laboratory experiments designed to simulate the commons. In the experiment, subjects were given the opportunity to invest tokens into a market scenario that worked like a tragedy of the commons. One market gave a fixed rate of return, one-for-one, while the other gave a rate of return based on the number of other individuals concurrently investing. The less people investing in this market, the more money they made, but as more and more people invested, returns would shrink and eventually cost investors, just as would happen in an overgrazed field or over-polluted river. So a good rate of return would be made if all the investors exercised restraint, but the best return would be made by someone who did not exercise restraint when everyone else did.

When subjects were given the opportunity to fine free-riders (those who chose not to restrain when everyone else did) but no chance to talk about a strategy they collectively earned only 9 percent of the maximum possible amount of return; yet, when allowed to communicate freely with no means to punish free-

[49] Hardin, “Tragedy of the Commons” pp. 1246-47.

riders, returns were *significantly higher* (73 percent of the possible maximum amount of return).[50] As explained in the study, "… these experiments suggest that covenants, even without a sword, have some force, while *swords without a covenant may be worse than the state of nature*." [51] What Ostrom's study shows is that there are factors beyond governmental coercion that are important in encouraging sustainable behavior. But in addition, it shows potential problems with governmental coercion; when the coercion interferes in factors important in fostering environmentally sustainable behavior, it can be counter-productive.

The veracity of this conclusion can be been in field studies modeled after Ostrom's results. For example, experiments simulating the tragedy of the commons in rural Columbian villages found that participants who were "confronted with external regulations . . . can in fact deviate from a group oriented strategy and concentrate in an individually oriented behaviour . . . [and that the] negative reciprocity was greatly enhanced by this externally imposed institution as verified by statistical analysis." But this point is best illustrated by an anecdotal experience included in the report. After one of the experimental sessions, a participant commented how the game reminded her of a scenario involving her father who was having problems with a neighbor illegally shifting their dividing fence during the night.

[50] The best of all scenarios was when the group was allowed to communicate *and* develop *endogenous* sanctioning (as opposed to *imposed* sanctioning); they received 93 percent of the maximum possible returns.
[51] Elinor Ostrom, J. Walker and R. Gardener, "Covenants With and Without a Sword: Self Governance is Possible," *The American Political Science Review* 86 (2) (1992): 404-17, quoted on p. 414 (emphasis added).

> She described how her father never approached the authorities to denounce the problem, and rather got involved in several arguments and conversations with his neighbor until they figured out a solution. I asked why he did not approached [sic] the authorities, and she explained that even if he might obtain the just outcome of moving back the fence, and the neighbour to be found in violation of the law [sic], he might have lost his neighbour forever.[52]

By using an outside source to control conflict, emphasis on communication is directed toward the mediator and not those directly involved. Such redirection can lead to a breakdown of communication between the individual actors and thus a breach in trust and reciprocity. So an important variable in determining the extent to which individuals are willing to exploit a resource, namely open communication, can be inhibited by governmental regulation. Indeed, the field study found that a number of important variables may be excluded when relying on governmental regulation: "Reciprocity, trust, information, repetition, are all concepts often ignored when designing policies to correct institutional failures arising from externalities."[53]

So the limits of governmental regulation become clearer when looking at all the factors involved in behavior and environmental exploitation. Both Hobbes and Hardin assume that individuals will act to the detriment of the group when there is not an outside force (viz., governmental coercion) to assure that

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[52] Jaun-Camilo Cardenas, "How Do Groups Solve Local Commons Dilemmas? Lessons from Experimental Economics in the Field," *Environment, Development and Sustainability* 2 (2000): 305-22; quoted on p. 307.

[53] Ibid., p. 306. For other examples of self-organized collectives working better than governmental coercion in regulating environmental exploitation, see Elinor Ostrom, *Governing the Commons: The Evolution of Institutions for Collective Action* (Cambridge: Cambridge University Press, 1990), chap. 3, pp. 58-102, and James M. Acheson, "The Lobster Fiefs Revisited: Economic and Ecological Effects of Territoriality in Maine Lobster Fishing," in *The Question of the Commons: The Culture and Ecology of Communal Resources*, ed. B. McCay and J. Acheson (Tucson: University of Arizona Press, 1987), pp. 37-65.

contracts will be kept. Yet, empirical studies have shown that this outcome is not always the case and that contracts may be agreed upon and kept without governmental regulation.

The Importance of Combining Ethics with Regulation

Still, there is a major component of environmental problems that has not yet been mentioned. Environmental degradation involves more than a breach in contracts; it is heavily influenced by how one understands and relates to the environment. Hardin may be right that the tragedy of commons is partially responsible for placing whales on the endangered species list, but hunters must have a particular attitude toward whales to kill them in the first place. Likewise, citizens must have a particular attitude toward sustainability before governmental regulation can any hope of being affective.

Take for example a recent rash of clear cutting taking place in Boiling Springs, North Carolina. Since February of 2006 the city has issued 368 logging permits, the vast majority being issued without accompanying building permits. Why? In February the federal Fish and Wildlife Service issued a notice that rapid development was threatening the habitat of the endangered red-cockaded woodpecker. The importance of that notice is that under the Endangered Species Act (ESA) of 1973, the federal government may be able to prevent development on private land if it is found to contain habitat for an endangered species.[54] Because private landowners were afraid of losing their development rights, they

[54] Associated Press, "Rare Woodpecker Sends a Town Running for Its Chain Saws," *New York Times*, 24 September 2006, National Edition, p. 30. For information regarding the ESA, see the Fish and Wildlife Service's webpage, http://www.fws.gov/endangered/esa.html.

began clearcutting the very habitat that the ESA set out to protect. Now it would be excessive to say that the landowners are cutting their pines simply because they lack a proper environmental ethic; even the most ardent birder might sweat at the thought of losing the development rights to their property. However someone who has no concern for endangered species certainly has no incentive to follow the spirit of the law if they can avoid it. In fact, those who care little for endangered species may decide it is better to kill any federally protected species that settles on their land rather than be subject to the stringent restrictions that would be placed on them.[55]

The futility of trying to create a sustainable society without a corresponding ethic can be emphasized by looking once more at the tragedy of the commons. Governmental coercion can only work under conditions of constant supervision (or the impression of such by the public) with the corresponding belief that non-cooperation will be punished rapidly and severely. These conditions are particularly difficult to fulfill in the arena of environmental problems where the commons work on both a global and micro scale, places where coercion cannot find a toehold. For example, consider again the serious problem of overfishing. According to a study recently published in *Science*, overfishing is happening at such a pace that if it continues unabated, many more species will be lost, marine ecosystems will significantly degrade and there will be global collapse of *all* species currently fished within forty years. Indeed, researchers found that twenty-nine percent of species globally consumed have

[55] For an analysis of the current proposed reforms to the ESA, see David Ridneour, "'TESRA' Endangered Species Act Reform Proposal Would Do More Harm Than Good" *National Policy Analysis* 531 (2005), available online at http://www.nationalcenter.org/NPA531TESRA.html.

been fished so heavily or were so affected by pollution or habitat loss that they were down to ten percent of previous levels.[56] But the problem is quite literally as large as the ocean and impossible to completely regulate. One of the current solutions is a push for small no-take zones, known as Marine Protected Areas (MPA) that can be highly regulated. Though the initial results from the zones seem positive, there is still some question of how well they can work. For example, only about thirty-five percent of Carribean MPAs and ten to fifteen percent of Indo-Pacific MPAs are meeting their expected goals.[57] One of the problems may be scientific, that there are large gaps of necessary knowledge for creating the appropriate reserves[58]; but it has also been argued that a significant problem is that MPAs lack the necessary community capacity, i.e., "the rules, procedures and values that people hold, which predispose them to work collectively for mutual benefit."[59] Without community capacity, opportunistic poachers are able to avoid the regulations in place, and they are able to do so in already *highly* regulated areas. What can be done about the rest of the seas?

Of course, without an environmental ethic, governmental coercion seems inadequate in dealing with the very small as well. Because of the nature of current technology, individuals have a much higher capacity to pollute than in the previous century. As one example, the EPA claims that one gallon of improperly disposed motor oil can potentially pollute 250,000 gallons of drinking water;

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[56] Boris Worm, et al. "Impacts of Biodiversity Loss on Ocean Ecosystem Services," *Science* 314 (2006): 787-90.
[57] Stephen C. Jameson, Mark H. Tupper and Jonathon M. Ridley, "The three screen doors: can marine "protected" areas be effective?" *Marine Pollution Bulletin* 44, no. 11 (2002): 1177.
[58] Peter F. Sale et al. "Critical Science Gaps Impede Use of No-Take Fishery Reserves," *Trends in Ecology & Evolution* 20, no. 2 (2005): 74-80.
[59] Stephen Jameson, "The Three Screen Doors," p.1179.

enough water to supply fifty people for a year.[60] Naturally then, improper disposal of motor oil is illegal; yet 120 *million* gallons are still poured down storm drains and tossed in the trash every year.[61] Now there are probably a number of reasons for such enormous non-compliance: that the penalties aren't harsh enough, or that the law is not enforced enough. Yet, there is no doubt that oil dumping is simply impractical to police. Short of barring do-it-yourself oil changes, it would be impossible to regulate where all waste oil ends up. Unfortunately, potential pollution nightmares not only run our cars but our TVs, laptops, iPods, Blackberrys, and cell phones as well, in short, all the trappings that make modern life modern. How can we hope to effectively monitor the disposal of the millions of toxic products that permeate our society?

Of course, it is not only the general public that needs to be regulated. As Garret Hardin has pointed out, there is an ancient question associated with government authority: *Quis custodiet ipsos custodes* — "Who shall watch the watchers themselves?"[62] Though a coercively structured society may be able to compel the ruled to follow laws, how will it compel the rulers and especially those who follow the rules? Environmental economists Richard Stroup and John Baden, working under the same premise as Hardin and Hobbes that "individuals [will] seek their own advantage within prevailing institutional arrangements," come to the conclusion that

[60] Environmental Protection Agency, "Got Your Driver's License? You Can Make a Difference." Published at http://www.epa.gov/epaoswer/education/pdfs/oil-teen.pdf
[61] Ibid.
[62] Hardin, "Tragedy of the Commons," pp. 1245-46.

> Institutional rules always allow governmental officials some discretion in determining access to resources. Claimants, therefore, have an incentive to invest in activities that might produce administrative outcomes favorable to themselves. Under these circumstances, some corruption exists in every political system. Informational lobbying, potential shifts of campaign support, actual or threatened lawsuits, and even bribery can all be brought to bear — at a cost — by those who wish to gain favorable decision from governmental policymakers who control the rights to resources.[63]

Ultimately then, at some level governmental coercion must coincide with a sustainability ethic, either at the level of the enforcers or the population at large.

Conclusion

This is not to say that governmental regulation is always and necessarily counterproductive as a solution to environmental problems, only to point to certain limitations in this approach. To expect to rely *completely* on governmental regulation for creating optimal behavior would be folly for a number of reasons. For one thing, it doesn't work. There are a number of factors besides coercion that are responsible for behavior towards environmental degradation, many of which can be inhibited by governmental regulation. Also, regulation can be futile without a corresponding ethic and, as the situation in Boiling Springs shows, it can even be counterproductive. Finally, governmental regulation is limited because it cannot be everywhere at all times. Thus, while governmental coercion can be helpful in creating optimal behavior, it has serious limitations. Yet, these

[63] Richard L. Stroup and John A. Baden, *Natural Resources: Bureaucratic Myths and Environmental Management* (San Francisco: Pacific Research for Public Policy Research, 1983), pp. 8-9.

limitations may be transcended when working in tandem with solutions that focus on developing personal moral standards.

CHAPTER 3

PERSONAL MORAL STANDARDS

The Gap between Beliefs and Behavior

The third problem that hinders the sustainable society involves a translation of beliefs to conduct. As shown in the previous two sections, in order to develop a sustainable society the individual must have a strong sense of personal responsibility and moral commitment. Even strong governmental coercion cannot achieve the goals of sustainability without a general disposition of the public to act in an environmentally friendly manner, there are simply not enough enforcement officers to compel everyone at all times. So a necessary component on the path to sustainability is an instilling of an environmental conscience. Doing so would act as a self-regulatory mechanism that could perform the job that governmental coercion cannot — educating and regulating daily personal behavior.

Now the importance of developing an environmental ethic is not a new idea. It springs naturally from the belief that moral education is the bedrock for a stable and healthy society.[64] Consequently, environmental philosophers have realized for years that an environmental ethic is essential for creating and supporting the change necessary for creating a sustainable world. Likewise, many have argued that education is a necessary step in achieving sustainability.

[64] It has been argued that a significant reason why current society suffers from instability and moral relativism has to do with the lack of true moral education. James Davison Hunter, for example, argues that the vacuous and splintered nature of modern-day moral education makes the development of character (and hence, moral discipline and autonomy) an impossibility. See *The Death of Character* (New York: Basic Books, 2000).

Aldo Leopold argued that “obligations have no meaning without conscience, and the problem we face is the extension of the social conscience from people to land.”[65] Consequently, he devoted a large amount of time to education and spreading ecological literacy in the hopes of creating an ecological ethic.[66] Eugene C. Hargrove has argued in favor of developing school curriculum for environmental citizenship, where children learn about the history of environmentalism and how American environmental values arose in a historical context.[67] Callicott has argued that what is needed is not just a change in knowledge but an entire reframing of the cultural world view: “the political implementation of environmental ethics . . . will follow upon the transition of the prevailing worldview from a Baconian-Cartesian-Newtonian model to a Darwinian-Einsteinian-Leopoldian model.”[68] Of course, there are a number of philosophers who emphasize the importance of a moral education in order to create an upright, responsible, and sustainable citizen and this is just a small sampling.[69]

Now because this is a topic that much time and energy has been devoted to, there has been ample discussion on the many potential problems with moral

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[65] Leopold, *A Sand County Almanac*, p. 246.

[66] See J. Baird Callicott, “Aldo Leopold on Education, as Educator, and His Land Ethic in the Context of Contemporary Environmental Education,” in *In Defense of the Land Ethic: Essays in Environmental Philosophy* (Albany: SUNY, 1989), pp. 223-37.

[67] Eugene Hargrove, “The Role of Socially Evolved Ideals in Environmental Ethics Education in Canada and the Yukon: A Historical Approach involving the Humanities,” in Bob Jickling, ed., *A Colloquium on Environment, Ethics, and Education* (Whitehorse: Yukon College, 1996), pp. 20-31, and "Toward Teaching Environmental Ethics: Exploring Problems in the Language of Evolving Social Values," *Canadian Journal of Environmental Education* 5 (2000): 1-20.

[68] Callicott, *Beyond the Land Ethic*, p. 51.

[69] Cf., Anthony Weston, “What if Teaching Went Wild?” in Scott Fletcher, ed. *Philosophy of Education 2002* (Urbana, Illinois: Philosophy of Education Society, 2003), pp. 40-52 and John F. Disinger, "Environmental Education for Sustainable Development?" *Journal of Environmental Education* 21, no.4 (1990): 3-6.

education.[70] Yet, one problem that has received relatively little attention involving an environmental ethic has not so much to do with how it is taught, or even how it is received and understood by students, but rather what comes *after* individuals have received and retained proper moral education.

It is intuitive that one's moral beliefs ought to translate directly into action prescribed by those moral standards, yet studies have shown that this is not always the case. For example, one study that interviewed members of a population control organization active in the U.S. during 1970's (*Zero Population Growth a.k.a. ZPG*, now called *The Population Connection*) found that "Among ZPG members under 30 years of age . . . the majority of those cognizant of the necessity of the one-child family intended to have two natural children, even when they felt the United States was already greatly overpopulated."[71] Another study that took place in Perth, Australia, found that consumers who had strong beliefs regarding personal responsibility towards conserving energy continued to consume high levels of electricity even when told of their high consumption and given tips on how to conserve. Only a group of subjects who were *explicitly* informed that their consumption patterns and values did not match cut electricity use, and even this reduction did not last beyond two weeks.[72] The surprising thing about these two studies is that they involve examples of individuals who have a well developed environmental ethic and presumably, a strong sense of

[70] For example, whose morals should be taught to whom and how it should be done. This is especially difficult in a pluralistic society and something that moral educators deal with. See Hargrove, "The Role of Socially Evolved Ideals," pp. 20-31.
[71] Larry D. Barnett, "Zero Population Growth, Inc.," *Bioscience* 21 (1971): 759-65. Quoted on p. 765.
[72] S. J. Kantola, G.J. Syme and N.A. Campbell, "Cognitive Dissonance and Energy Conservation," *Journal of Applied Psychology* 69 (1984): 416-21.

personal responsibility. In the ZPG study, the individuals being interviewed were among the most knowledgeable and concerned with population growth (so much so as to voluntarily join an organization created to curtail it), and yet they failed to restrain themselves. The second study concerned a less involved group, but these were individuals who had stated in a survey that people bear a personal duty to conserve energy. Clearly both groups had strongly developed attitudes pertaining to the environment, yet they both failed to act in ways consistent with their attitudes. Consequently, if moral education is going to be useful in creating a sustainable society, there needs to be a serious look at the connection between one's attitude and one's actions.

Social Cognitive Theory and Moral Disengagement

The idea that morals regulate behavior has some empirical backing and it makes intuitive sense.[73] Society works to control negative behavior by social censure and other unfavorable consequences. Moral standards, on the other hand, control behavior through self-condemnation and self-satisfaction. When individuals act in accordance with their moral standards, it gives them positive self-reactions and when they act against them, they experience self-censure.[74] Furthermore, these reactions (self-approval and self-censure) are fairly strong self-regulating mechanisms of action because self-contempt is one of the worst

[73] For studies that support a correlation between moral judgment and moral action, see Lawrence Kohlberg et al. "Moral Stages: A Current Formulation and a Response to Critics" in John A. Meacham, ed., *Contributions to Human Development*, vol. 10 (Switzerland: S. Karger, 1983): 47-53.

[74] Albert Bandura, "Social Cognitive Theory of Moral Thought and Action," in *Handbook of Moral Behavior and Development: Theory, Research and Applications*, ed. William M. Kurtines and Jacob L. Gewirtz (Hillsdale, N.J.: Lawrence Erlbaum Associates, 1991), 1: 45-103. Quote on p. 68.

punishments. People rarely wish to violate their own moral standards. Consequently, when individuals *do not* act in ways consistent with their values, there must be something inhibiting these self-regulating mechanisms. Albert Bandura, a leading psychologist at Stanford University and the founder of Social Cognitive Theory (SCT) argues that often what inhibits these self-regulating mechanisms is something called *moral disengagement*: the ability to cognitively redefine scenarios where one's values and behaviors conflict. As a result, disengagement is a powerful obstacle in the path from attitude to conduct because it alleviates internal regulating mechanisms.

Originally, models of human behavior took an extremely mechanistic approach, understanding behavior entirely in terms of observable acts described by stimulus-response characteristics.[75] SCT breaks from traditional behaviorism by placing the self-regulation of conduct (that is, how individuals act when confronted with an ethical decision) neither squarely in the camp of personal autonomy nor in the hands of social determinists. Instead, SCT argues that behavior is regulated by both social sanctions and internalized self-sanctions. Social sanctions control negative behavior by social censure and other unfavorable consequences. Internal regulations influence behavior through self-condemnation and self-satisfaction; when individuals fail to act in accordance with their moral standards, they experience self-reproof, whereas when they act in accordance with their moral standards they experience positive self-reactions. Thus while social sanctions may heavily influence behavior, internal sanctions

[75] Danice Stone, "Social Cognitive Theory Overview", *University of South Florida Health Directory* (University of South Florida, 1998, revised, 1999). Published at http://hsc.usf.edu/~kmbrown/Social_Cognitive_Theory_Overview.htm. (accessed Oct, 30, 2006).

can often be stronger because individuals like to think highly of themselves and there is no greater punishment than self-contempt. [76]

If so, then there should be a strong correlation between personal standards and conduct because individuals would want to avoid self-condemnation. Yet, as has already been pointed out, such correlation is not always the case. What Bandura argues is that when people's actions conflict with their moral standards, they use different cognitive methods to prevent self-regulatory mechanisms from activating. The gap between moral thought and action comes not from improper moral education or an undeveloped set of personal standards, but rather from the ease with which someone can disengage from self-regulating mechanisms.

To illustrate this point, consider a recent study described in the *New York Times*. Professors at Iowa State University and the University of Arkansas decided to see how a group of students who had cheated on a take-home exam would score on a standard test of moral judgment. As it turned out, the scores on the moral judgment test failed to correlate with the degree to which students were cheating. In fact, one of the *most dishonest students scored highest* on the morals test.[77] Yet, these students, even the most dishonest, were not lacking in moral education because they understood what constituted ethical behavior and saw themselves as conforming to it. What accounted for the difference in actual conduct was the student's ability to rectify their actions. For example, one student

[76] Bandura, "Social Cognitive Theory of Morality," pp. 68-70.
[77] Benedict Carey, "When Death Is on the Docket, the Moral Compass Wavers," *New York Times*, 7 February 2006, Tuesday, Health & Fitness sec., p. 1. The study being referred to is Tim West, Sue Ravenscroft, and Charles B. Shrader, "Cheating and Moral Judgment in the College Classroom: A Natural Experiment," to be published in *Business & Professional Ethics Journal*.

was quoted as saying, “I think it’s hard for people not to look at the answer manual if it’s available,” which effectively displaced moral blame from the student to the teacher. Another student justified his actions by comparing them to the actions of other students, “I really don’t consider working with another person that unethical[78]. . . [although] Taking and copying answers from the key was highly unethical.”[79]

What happens is that individuals use different methods of moral disengagement or distancing to cognitively change how they see their own conduct. It is not that the students are lacking in self-standards — quite the opposite. The students attempted to cognitively change the morality of their action in order to *fall in line with their self-imposed moral standards*. None of the students readily admitted to cheating, something that would have undoubtedly rendered self-censure. Rather, they attempted to describe their actions in such a way that they would not qualify as cheating, or at the very least not deserving of self-censure.

SCT identifies three points in the behavioral process where disengagement can occur. The first point is in how the conduct itself is construed, where individuals use moral justification, palliative comparisons, or euphemistic labeling to justify the act. The second point is how one relates to an action, by distorting or obscuring the relation between actions and the harm they cause, moral agents are able to minimize the sense of personal responsibility. The last point for disengagement concerns how people view the victims of an action;

[78] Student collaboration was *explicitly* forbidden by the professor.
[79] West, “Cheating and Moral Judgment.”

dehumanizing or attributing blame to a victim can make the consequences of their actions seem minute or even deserved.[80]

Now the use of moral disengagement is not necessarily problematic. For one thing, it keeps individuals from becoming emotionally overwhelmed. Some professions such as psychotherapy or those who staff social welfare programs require high levels of disengagement because they experience many people affected deeply by poverty, disease and years of neglect. Were such professionals to fully empathize with their clients, they would be too overwhelmed to continue in the occupation. Disengagement works as a moderating device to reduce impairing personal distress.[81] Also, moral disengagement is evolutionarily adaptive because it maintains psychological well-being when the transgression of moral taboos might be necessary. The Inuit, for example, routinely practiced infanticide to keep population levels in check with environmental constraints. Such a grisly and biologically counter-intuitive practice would strongly go against the ingrained moral taboo of killing humans. [82] In modern-day circumstances, moral disengagement provides emotional well-being of those who may find themselves enmeshed in social structures which require actions contrary to their moral standards. A recent study involving prison executions found that staff members on execution teams are more likely than other prison guards to justify execution through a variety of disengagement mechanisms. Because the

[80] Bandura, *Social Foundations of Thought and Action* (London: Prentice-Hall, 1986), pp. 375-85.
[81] Ibid., pp. 383-84.
[82] See Marvin Harris, *Cows, Pigs, Wars and Witches; The Riddles of Culture* (New York: Random House, 1974). However, it should be noted that his conclusions have recently been challenged; for example see Eric Alden Smith and S. Abigail Smith, "Inuit Sex-Ratio Variation: Population Control, Ethnographic Error, or Parental Manipulation?" *Current Anthropology* 35 (1994): 595-614.

members of the execution team are involved with a direct conflict of the socialized norm that killing is wrong, it is not surprising that they would make the heaviest use of disengagement techniques. Furthermore, the study found that the execution support team,[83] while highly engaged initially, became less so as the number of executions increased. In fact, by the time they had participated in 15 executions their level of disengagement no longer differed significantly from their counterparts on the execution team. [84]

The recorded levels of disengagement in this study, especially for the support staff, illustrate the ameliorative properties of disengagement. By using disengagement techniques individuals faced with distressing scenarios (specifically, those on the execution squad) were able to minimize personal involvement in the execution process and perform actions that, in other conditions, elicit self-condemnation (i.e., killing a human being). Still, the enabling effects of moral disengagement should not be taken lightly. They are precisely what allow ordinary, rational and otherwise moral individuals to commit brutal acts.

One of the most prominent examples of this was the functioning and psychology of genocide in Nazi Germany. When Hannah Arendt covered the trial of Adolph Eichmann, she found that the high ranking Nazi officer was not a moral monster but a rather relatively normal individual with an extraordinary ability to

[83] The execution support team was made up of individuals who performed emotionally laden jobs such as spiritual advisor, counselor for the condemned inmate, counselor for the condemned inmates family, or counselor for the families of the victim.
[84] Michael J. Osofsky et al., "The Role of Moral Disengagement in the Execution Process," *Law and Human Behavior* 29, no. 4 (2005): 371-93.

not think about what he was doing.[85] Similarly, a number of holocaust researchers have made note of the Nazi regime's ability to enroll decent, ordinary individuals to do extraordinarily cruel things. For example, Arendt notes that the Nazi hierarchy was surprised at the ease with which the German civil service adapted to handling paperwork concerning the Final Solution. No doubt there ability to do so was readily facilitated by moral disengagement through the fragmented goal structure of the civil service structure. Responsibility was diffused because workers neither made the decisions concerning the Final Solution nor carried out the final acts.[86] Likewise, Hitler's eugenics project was ultimately carried out with the complicity of competent and sometimes prestigious medical doctors. Part of the reason these doctors were willing to perform the killings was the ability of the regime to effectively utilize moral disengagement by diffusing and displacing responsibility:

> In the entire sequence — from the reporting of the cases by midwives or doctors, to the supervision of such reporting by institutional heads, to expert opinions rendered by central consultants, to coordination of the marked forms by Health Ministry officials, to the appearance of the child at the Reich Committee institution for killing — there was at no point a sense of personal responsibility for, or even involvement in, the murder of another human being. Each participant could feel like no more than a small cog in a vast, officially sanctioned, medical machine.[87]

[85] Hannah Arendt, *Eichmann in Jerusalem: A Report on the Banality of Evil* (New York: Viking Press, 1963).
[86] This point is made in Maury Silver and Daniel Gelle, "On the Irrelevance of Evil: The Organization and Individual Action," *Journal of Social Issues* 34, no. 4 (1978): 125-36; especially pp. 130-31.
[87] See Robert Jay Lifton, *The Nazi Doctors: Medical Killing and the Psychology of Genocide* (New York: Basic Book Publishers, 1986). Quote on p. 55

So although a strong ethic may be important in developing standards for self-regulation, moral disengagement significantly affects the extent to which self-regulation will be activated. Even deeply entrenched moral standards such as the taboo against killing humans may be violated when coupled with strong disengagement mechanisms. Consequently, identifying areas for disengagement in behavior towards the environment is of the utmost importance for implementing an ethic conducive to sustainability. As mentioned earlier, a strong environmental ethic is necessary for behaving in a sustainable manner because governmental coercion cannot work alone. Yet, a strong environmental ethic must be readily engaged in order to be affective in regulating behavior. So by identifying and minimizing scenarios conducive to disengagement, there is a greater degree of likelihood that individuals will behave in a sustainable manner.

Disengagement and Environmental Ethics

Although moral disengagement has traditionally been used in explaining the perpetration of human to human maltreatment, it is equally useful in understanding human abuse towards the environment. Of course, before moral disengagement can be used to explain transgressive behavior, there must be some assessment of what constitutes transgressive behavior in the first place.[88] This assessment is easier in the case of inhumanities; many will readily agree that killing an innocent human violates moral standards especially in the case of

[88] This critique has been leveled against Bandura who relies heavily on the reader's intuition as to what constitutes transgressive behavior. See, for example, Elliot Turiel, "Moral Judgment, Action, and Development," in Dawn Shrader, ed., *The Legacy of Lawrence Kohlberg*, no. 47 (San Francisco: Josey-Bass, 1990), pp. 31-49. See especially pp. 42-46.

genocide. But what constitutes moral transgressions in terms of the natural world is rarely agreed upon by the general public. Fortunately, this thesis is primarily concerned with those individuals who *already* hold foundational beliefs toward the environment so it is not unreasonable to assume the morality of some basic actions. So instead of choosing and defending one value system that defines proper environmental behavior, and consequently, the legitimacy or illegitimacy of specific acts, it will be more helpful to show simply how disengagement facilitates specific acts that would reasonably be regarded as unfriendly to the environment.

Recall the main areas where disengagement occurs, the first being how harmful action is reconstrued to appear neutral. One of the primary ways of accomplishing this is through convoluted and sanitized language which masks the detrimental conduct and consequently reduces the individual's sense of moral agency. As Bandura notes, "Euphemisms are extensively used in everyday life when people have to do things that bring personal benefit but harm others. In such situations, they preserve their self-esteem by characterizing what they do in benign language."[89] Such language can appear in a variety of ways in environmental problems. For example, euphemized language shows up when talking about pollution: "The acid rain that is killing our lakes and forests loses its acidity when it is called 'atmospheric deposition of anthropogenically derived substances.' It's pretty hard to get exercised over anthopogenically derived

[89] Quoted in an interview with Bandura, in Richard I. Evans, *Albert Bandura: The Man and His Ideas — A Dialogue* (New York: Praeger Publishers, 1989), p. 43.

substances. 'Acid rain' is a different story."[90] In a similar vein, environmental issues are often described in ways that obscure the agentic nature of the problems. Species are *lost* or *disappear*, a wording of extinction that minimizes human responsibility in the problems. In truth, species are not *lost* in the usual sense of the word; they are continually pushed to extinction from human habits, attitudes and actions.

Another area where disengagement often occurs is when individuals are distanced from the harmful outcomes of their acts. Self-sanctions are most strongly activated when personal responsibility for an action is unequivocal. Thus, one way of cognitively distancing oneself from the consequences of an action is the displacement of responsibility onto another individual. In this way, individuals are spared self-sanctions because they are not the actual agent of the acts. Most of the research regarding the displacement of responsibility involves hierarchical systems and figure of authority. But globalization and economic practices have evolved news ways to displace responsibility for one's actions. Wendell Berry describes the economic abdication of responsibility in this way,

> What has happened is that most people in our country, and apparently most people in the 'developed' world, have given proxies to the corporations to produce and provide all of their food, clothing, and shelter. Moreover, they are rapidly giving proxies to corporations or governments to provide entertainment, education, child care, care of the sick and the elderly, and many other kinds of 'service' that once were carried on informally and inexpensively by individuals or households or communities. Our major economic practice, in short, is to delegate the practice to others.[91]

[90] Ibid.
[91] Wendell Berry, "The Idea of a Local Economy," *Orion Magazine*, Winter 2001.

With the delegation of these activities also goes the delegation of responsibility associated with them. If the farmer who supplies strawberries uses methyl bromide (a fumigant linked with ozone depletion), it is not the buyer's responsibility; it is the farmer's. If burning coal puts mercury in the ocean, it is the responsibility of the coal company, not the consumer. In this way, there is a large gap placed between one's desire and support for an action and the consequences of that action. This displacement of responsibility helps one to understand counterproductive actions of some environmentalists. Recall Sagoff's quote,

> I speed on the highway; yet I want the police to enforce laws against speeding. I used to buy mixers in returnable bottles — but who can bother to return them? I buy only disposable now, but to soothe my conscience, I urge my state senator to outlaw one-way containers. I love my car; I hate the bus. Yet I vote for candidates who promise to tax gasoline to pay for public transportation.[92]

Even though Sagoff clearly recognizes his role in the exacerbation of particular environmental problems, he feels less responsibility for his actions because it is being displaced onto policy makers. As stated in his own word, he pushes for governmental responsibility to soothe his own conscience.

Another method lightening the moral load tied to the consequences of an action is by diffusing responsibility and obscuring the consequences. In the environmental realm, these two methods for disengagement often work in tandem and consequently represent one of the largest barriers to reconciling

[92] Sagoff, *The Economy of the Earth*, pp. 52-53.

environmental attitudes with environmentally friendly behavior. The reason for this is because our social structure and economic system tend to create a perpetual amnesia in regards to product consumption. Garbage is literally thrown *away*, water mysteriously appears out of the faucet and disappears down the drain, and heat comes from a thermostat on the wall and appears through vents on the floors and ceilings. Even when one knows the consequences of an action, such as buying food grown with pesticides that run-off into water ways and disrupt food-chains, the consequences of those acts are obscured by the marketplace. Items for consumption are presented as whole entities; devoid of any past production. How the product was made, in what conditions, how much energy was used, where it comes from, the raw materials that compose it, etc. Essentially, the overall impact of the product is left off the label and consequently off the consumer's mind. It is easier to buy 'conventional' produce when the ramifications are left unsaid. In fact, the amount of obscurity regarding consumption can be seen in the anecdotal stories of children confusing the grocery store and not earth as the origin of our food.[93] Furthermore, current market interactions are designed so the consumer *prefers* ignorance. The story of a product's life, the producer, the packager, the marketer, the materials, have all been sundered from the purchasing experience. The interchange between buyer and seller can offer no ethical guidance. [94] Indeed, the economic system

[93] One example can be found in Martin Labar's "A Biblical Perspective on Nonhuman Organisms: Values, Moral Considerability and Moral Agency," in Eugene C. Hargrove, ed., *Religion and the Environmental Crisis* (Athens, Georgia: University of Georgia Press, 1986). One of Labar's former students who taught high school asked his class what would happen if all of the green plants ceased to exist. He was reassured that, although we would be unable to garden, we could still get food from the grocery store.

[94] Murray Bookchin, *The Modern Crisis*, 2nd ed. (Montreal: Black Rose Books, 1987), p. 85

asks us to make decisions based only on personal interests, as a self-interested consumer rather than a moral agent and concerned citizen.[95] In this way, the desire to investigate the impact of consumption is checked at the door by slick marketing and instant gratification. This encourages blind consumption at a cost of personal values. In order to make moral decisions we need to have some capacity for gaining knowledge, reflecting on motives, predicting outcomes, criticizing principles and so forth. All of these conditions are inhibited by the current social structure and can produce an *unintended* contradiction of our own established ethical guidelines. As an environmentalist, I wish to see rain forests flourish; yet, as a consumer, I may be purchasing products utilizing irresponsible swidden agriculture. As a humanitarian, I may deplore slavery but support the slave trade through chocolate consumption. Though I am quite clear with where I stand in regards to groundwater pollution, I am not so clear as to where my coffee stands.

Recently, a journalist wrote a book that followed the path of a conventional meal back to its numerous and unexpected origins. What he found was that the end product sold to the consumer is often a highly sanitized conception that rarely, if ever, hints at its makings. To give one dramatic example, the author traces the origins of a McDonald's meal and finds that it is composed mainly of corn, an item that fails to appear on the menu at all. Yet the corn is there, it feeds the cows and chickens which are made into hamburger and nuggets. It also supplies the sugar source for the soft drinks and milk shakes. In fact, it shows up in the bun and ketchup, in the salad dressings and sauce for the nuggets and

[95] See Sagoff, *Economy of the Earth*, pp. 24-73, for a further explication of this idea.

even in the french fries, which are often deep fried in a vegetable oil composed of corn. All in all, the author gave a rough calculation of six pounds of corn for a meal that feeds that three. [96] But it is not simply that corn is hidden from view in the conventional fast food meal, the fertilizer and pesticides used in the corn's production, the mountains of manure from the cattle lots, the energy that goes into growing, transporting and storing, all of these are concealed in the daily interactions with products. In fact, many other factors go into a meal that even the most concerned consumer might miss. A chicken nugget for example contains several completely synthetic ingredients with names and origins foreign to the lay person.

> But perhaps the most alarming ingredient in a Chicken McNugget is tertiary butylhydroquinone, or TBHQ, an antioxidant derived from petroleum that is either sprayed directly on the nugget or the inside of the box it comes in to "help preserve freshness." According to *A Consumer's Dictionary of Food Additives*, TBHQ is a form of butane (i.e., lighter fluid) the FDA allows processors to use sparingly in our food: It can comprise no more than 0.02 percent of the oil in a nugget. Which is probably just as well, considering that ingesting a single gram of TBHQ can cause "nausea, vomiting, ringing in the ears, delirium, a sense of suffocation, and collapse." Ingesting five grams of TBHQ can kill.[97]

Although these facts, if widely known, would no doubt strongly affect consumer habits, they are largely obscured with consumer complacence, brought about by a system that *already* works in a highly secretive manner. Although *unknowingly* eating TBHQ is not caused by moral disengagement per se (as the

[96] Michael Pollan, *The Omnivore's Dilemma: A Natural History of Four Meals* (New York: Penguin Press, 2006), pp. 115-17.
[97] Ibid., pp. 113-14.

actor is unaware of the consequences of their actions), it is strongly facilitated by a system which encourages disengagement.

The distancing of consequences is further facilitated by society's growing emphasis on disciplinarity and expertise leading to a hyper-specialized division of labor.[98] This emphasis can act as a tool for disengaging because massive projects are separated into seemingly harmless and independent tasks. Furthermore, the goals of each of the subtasks often work independent of the goal of the larger project. As one article points out,

> A help-wanted ad for a technician to [make napalm] would describe the skills required for that specific function, not the organization's end products . . . The technician does not accommodate the speed and quality of his or her work to the number of people napalmed, but responds to monetary incentives, group production norms, the orders given by supervisors, and so on.[99]

Similarly, with regards to the overfishing of the oceans, stopping unsustainable harvesting is not just a matter of catching a few unsavory individuals. Currently overfishing happens through a worldwide network of reputable members of society who contribute through seemingly independent labors which insulate them from personal responsibility. One group manufactures the tools and techniques used in unsustainable harvesting. Another purchases the harvests for selling to the public. Others advertise and market the catch. Still others store, stock, and order them. Finally, the general public consumes them.

[97] For a discussion on specialization in academia and philosophy specifically, see Frodeman, "The Policy Turn in Environmental Philosophy," pp.14-19.
[99] Silver and Geller, "On the Irrelevance of Evil," p. 131.

By fragmenting and dispersing the various labors involved, contributors all see themselves as decent and legitimate practitioners of their trade rather than parties to the collapse of the oceans.[100]

The final area of disengagement involves how people view the victims of their actions. In terms of harms committed against other humans, it generally takes the form of dehumanization. Though de*human*ization hardly seems appropriate for harms against the environment (considering it is comprised mainly of *non*-humans), it is still applicable to the natural world. Lexically, to *dehumanize* someone is to deprive them of human qualities or attributes. In terms of moral judgment, this would mean the stripping away of characteristics which afford moral consideration as well as empathetic or vicarious suffering. Silver and Geller have explained dehumanization in this way:

> When a person, *P,* is considering an act in relation another, *O,* there is a culturally determined range of attributes of *O* that is relevant to *P* in deciding upon his act. The most important part of this range consists of *P*'s awareness of *O* as an actor who has his or her own perception of the situation and desires and goals relating to that situation. In a dehumanized relationship, the range of perception is narrowed to only that which is relevant to *P*'s carrying out a particular task at a particular time. *O*'s attributes as an actor with desires and goals are not attended to by *P*.[101]

Silver and Geller see *O*'s morally relevant qualities as having a "his or her own perception of the situation and desires and goals relating to that situation." Yet, the morally relevant qualities of an enitity will be dependent on whichever

[100] This example is an altered version of one Bandura gives concerning weapons merchants. See Bandura, "Moral Disengagement in the Perpetration of Inhumanities," *Personality & Social Psychology Review* 3, no. 3 (1999): 193-209.
[101] Silver and Geller, "On the Irrelevance of Evil," pp. 128-29.

value system is doing the judging. Animal rights activists for example, will see a broader set of morally relevant qualities such as sentience or being the subject-of-a-life.[102] If working from a biocentric or ecocentric framework, the morally relevant qualities may broaden again, possibly including criteria such as *autopoiesis*, containing a teleological center of life, or an entity's function in an ecosystem.[103] Given these possible value systems, how might dehumanization occur?

One way is through language. In terms of human to human conduct, renaming is one of the most effective ways of dehumanizing a victim. As one author describes:

> Let me tell you how to kill people efficiently. . . . First you have got to call your proposed victims names. . . . if we propose to kill a fellow human being and justify it, we have to redescribe him in such a way that he no longer belongs to us, becomes an alien being. . . . and in that way the inhibition against killing is effectively weakened.[104]

[102] Subject-of-a-life is a criteria developed by Tom Regan, *The Case for Animal Rights* (Berkeley: University of California Press, 1983). Sentience is stressed most notably by Peter Singer, *Animal Liberation,* 2nd ed., (New York: New York Review of Books Press, 1990).

[103] *Autopoiesis* is a concept created by the Chilean biologists Humberto Maturana and Francisco Varela from Warwick Fox and used by Warwick Fox, *Toward a Transpersonal Ecology: Developing New Foundations for Environmentalism* (Boston: Shambhala, 1990). According to Fox, autopoietic entities are those that are "primarily and continuously concerned with the regeneration of their own organization activity and structure" (p. 171). A teleological center of life comes from Paul Taylor. Something has a teleological center of life when its "internal functioning as well as its external activities are all goal-oriented, having constant tendency to maintain the organism's existence through time and to enable it successfully to perform those biological operations whereby it reproduces its kind and continually adapts to changing environmental events and conditions." *Respect for Nature* (Princeton, N.J.: Princeton University Press, 1986), pp. 121-22.

[104] Denys Turner, *Faith Seeking* (London: SCM Press, 2002), p. 61; as quoted in Andrew Linzy, "'The Powers That Be': Mechanisms that Prevent us from Recognising Animal Sentience," *Essays in Philosophy* 5, no. 2 (2004). Published at http://www.humboldt.edu/~essays/linzey.html.

Animal rights activist, Carol J. Adams has noted the use of technique in reference to animals: “Language distances us further from animals by naming them as objects as ‘its,’ . . . Just as the generic ‘he’ erases female presence, the generic ‘it’ erases the living, breathing nature of the animals and reifies their object status.”[105] One may also note this happening in terms of the environment as well. Terminology that refers to the natural world as *products* or *resources* dehumanize by reinforcing just one dimension of the entities in question, the dimension of utility for human kind. Scott Friskics, who develops the notion of a *dialogue* with the natural world, refers to this sort of dehumanization:

> Most of us have so little direct contact that there are few opportunities for hearing. Or what’s worse, we take up with [nature’s] creatures the same way we take up with our artifacts, denying their autonomy and eloquence, reducing them to their function and structure, and defining them in terms of humanly conferred values and uses. In other words, we transform eloquent fellow creatures into mute, plastic, “natural resources.”[106]

It should be emphasized that this particular example is mostly applicable to those who ascribe to specific value systems like ecocentrism which senses an inherent value in the natural world. But this sort of dehumanization, i.e., the stripping away of morally considerable characteristics, is one that is often facilitated by economics, language, and the notion of efficiency.[107] Even if one does not fully agree with ecocentric value judgments, there is still need to be

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[105] Carol J. Adams, *The Sexual Politics of Meat: A Feminist-Vegetarian Critical Theory* (New York: Continuum, 1990), p. 64.
[106] Scott Friskics, “Dialogical Relations with Nature,” *Environmental Ethics* 23 (2001): 391-409; quote on pp. 309-400.
[107] Hargrove for example, argues that the language of economic utility has largely replaced talk of intrinsic value. See “Toward Teaching Environmental Ethics.”

wary of scenarios that use language to subtly frame important moral considerations.

There is one final point to make regarding moral disengagement as an inhibitor of self-sanctioning conduct. As pointed out earlier, disengagement should always be avoided because it can prevent emotional exhaustion in circumstances where actions and beliefs readily conflict (like in the case of public executioners). Problems develop when excessive disengagement occurs, when someone beings to *continually* inhibit self-reproach. To illustrate this point, it is helpful to recall Callicott's argument concerning environmental ethics and individual actions. Callicott begins the argument by pointing out that in comparison with other types of ethical orientations, environmentalists seem downright hypocritical. Because environmentalists seem to do a lot of things contrary to their beliefs. An animal rights activist will refuse to eat meat, a woman against abortion will not have one, and a pacifist will refuse to serve in war. Yet, an environmentalist may eat seafood from overfished oceans, drive a gas-guzzling SUV in the midst of a carbon crisis, have six children, buy foods grown with pesticides, or all of the above. Callicott resolves this seeming hypocrisy by arguing that environmental problems are holistic and thus require a political solution to be successful, whereas other ethical domains such as animal rights or fetal rights are individualistic and can be resolved through individual action. But as I showed earlier, individual actions are necessary for solving environmental problems. Because individual actions have a very real effect both in terms of physical and cultural impact. Taken over time, individual actions can lead to

dumpsters of trash, pounds of pesticides, tons of carbon emissions, and so on. Furthermore, it is safe to say that most environmentalists already believe that individual actions make a difference. The strongest proof of this point is recycling, which almost all environmentalists participate in, even collective-action environmentalists.[108] Why recycle if our individual actions have no real effect? The reason is because recycling does make *some* difference, small though it may be, and it is consistent with environmental values. But if individual actions do make a difference, as is implicitly acknowledged by the vast majority of environmentalists, why don't they choose to live lifestyles fully consistent with their values?

The answer most likely lies in the ease and ability with which environmental beliefs can be put into practice. If all environmental decision were separated into practical, easily applicable rights and wrongs like animal rights or fetal rights decision (eating a chicken salad vs. gazpacho or having an abortion vs. not having one), then there were would be much less reason to see environmental ethics as something specific to the group than to the individual. The argument for seeing environmental ethics in a holistic manner is based more on the frustration and *inability* for an environmentalist to act in a truly consistent way than on the insignificance of individual actions. In the developed world, to truly minimize one's impact on the environment it is not enough to ride the bus or even live off the electrical grid; one has to live independent of the entire civilization grid: no electricity, growing or harvesting one's food, walking for

[108] Callicott himself "Dutifully recycle[s] cans, bottles, and papers. . . ." *Beyond the Land Ethic*, p. 45.

transportation (even bicycles use possibly environmentally degrading parts like mined metals, oil as lubrication, industrial rubber, etc.), making one's clothes and so on. Besides this sort of lifestyle not being desirable to many people, it quite arguably is not even a possibility. When the question of consistency comes up, it is no wonder that fetal rights activists are consistent when environmental activists are not. Environmental ethics distinguish themselves strongly from other ethics by requiring a far more stringent application of behavior; the difference between ethical domains isn't one of holism versus individualism, but rather the degree of behavioral change associated with each ethic. While the abortion opponent may be faced with an unwanted pregnancy once or twice in a lifetime, the environmentalist is *continually* making decisions regarding appropriate behavior. Even if one recycles, he or she may still drive. Even if one rides a bike *and* recycles, he or she may still eat factory-farmed meat that pollutes groundwater and promotes industrial agriculture.

Leopold described the heartrending position for environmentalists more than sixty years ago: "One of the penalties of an ecological education is that one lives alone in a world of wounds. Much of the damage inflicted on land is quite invisible to laymen."[109] What happens to those who quite regularly see the damage? "[One] must either harden his shell and make believe that the consequences of science are none of his business, or he must be the doctor who sees the marks of death in a community that believes itself well and does not want to be told otherwise."[110] Now suppose that one is not only ecologically

[109] Leopold, *Sand County Almanac*, p. 197
[110] Ibid.

savvy to the damage inflicted on the land but also aware that his or her individual actions are in some sense *responsible* for the "marks of death"? Leopold's advice for these unfortunate individuals may well have been from the passage quoted earlier, "you are the market . . . . If you want conservation wheat, you will have to raise it yourself." But his advice was given at a different time, in a different culture. The constrictions of today's realities, hyper-specialization, and division of labor mixed with an unbreakable reliance on a capitalist economic system render Leopold's advice obsolete. In the first half of the twentieth century, the consequences of individual actions on environmental degradation were relatively easy to diagnose and change in comparison to today. One cannot even eat lunch, whether made at home or at a restaurant, without encountering multiple morally questionable practices regarding the ecological footprint of the meal. Was it organic? Factory-farmed? Did the farmers use negative practices in terms of soil and water conservation? How far did it travel to get to my plate? Yet if one is to grow his or her own food (and most people lack the equipment, land, endurance and general know-how to subsist solely from their own hand), he or she must sacrifice many, many hours of time and labor for something so easily gained in the conventional world. This is the heart of the environmentalists' dilemma; we are born into a world of wounds which we unwillingly and even unwittingly inflict. So how do we cope? By morally disengaging.

Minimizing Disengagement

If an environmental ethic is going to be effective at regulating behavior, it must be complemented with social and economic systems that encourage an awareness between actions and consequences, a reminder of the morally considerable characteristics of the environment and ultimately, a realistic evaluation of one's actions. Unfortunately, it is *not* currently so complimented and as has been pointed out, many of the conditions of modern life are conducive to disengagement and these conditions are reinforced by institutions and power structures. Still, it is possible to suggest initial ways to create change within these systems to minimize the chances of irresponsible disengagement.

Developing Environmental Empathy

As stated before, one way that disengagement can take place is through dehumanization, where individuals reconstrue the perceived harm of an action by ignoring morally considerable aspects of an entity. To illustrate how dehumanization of the environment may be minimized, it will be helpful to compare how it is reduced in human-to-human relationships.

It has been noted in experiments involving the tragedy of the commons that resource users are more likely to cooperate when, among other things, the users share a group identity.[111] Sharing a group identity facilitates cooperation because there is a sense of connectedness with others in the group which

[111] Thompson, "Tragically Difficult," pp. 242-43. Although the tragedy of the commons may have less to do with environmental attitudes than with cooperation and competition (see Jeffrey M. Smith and Paul A. Bell, "Environmental Concern and Cooperative-Competitive Behavior in a Simulated Commons Dilemma," *The Journal of Social Psychology* 132 [2001]: 461-68), it is still a useful starting point because resource users often use disengagement mechanisms to justify continued exploitation.

creates a path for empathy, something that leads to more trust and more concern about the other's well-being with regards to the resource depletion. That identifying with others is an important factor in regulating harmful actions is also supported in Stanley Milgram's famous obedience tests.[112] Milgram found that subjects were less likely to follow an authority figure's order to shock a victim when the victim's pain became more obvious and personalized.[113] The reason for this unwilingness, Bandura argues, is that

> The strength of self-evaluative reactions partly depends on how the perpetrators view the people toward whom behavior is directed. To perceive another as human enhances empathetic or vicarious responsiveness through perceived similarity. The joys and suffering of similar persons are more vicariously arousing than those of strangers or individuals who have been divested of human qualities. Personalizing the adverse effects experienced by others also make their suffering much more salient.[114]

So one way of reducing dehumanization in human to human relationships is through continuous and ongoing relationships, strong enough to develop

[112] Milgram made subjects believe that they were participating in an experiment to determine whether negative reinforcement expedited learning. The subject was paired with an "expert," who was identified as the researcher conducting the experiment and a "learner." Every time the "learner" gave the wrong answer, the subject's task was to administer an electric shock and the "expert" would record the data to see if any improvement was made. The subjects believed that for each wrong answer, the "learner" was receiving actual shocks, though in reality none were given. As the experiment progressed, subjects were made to believe that with each incorrect answer, the voltage level of the shocks delivered were increased as well. With the increase in voltage, the "learners" acted as though they were suffering from increasing pain and even in mortal danger. For example, at 150 volts one "learner" shouted "Ugh!!! Experimenter! That's all. Get me out of here. I told you I had heart trouble. My heart's starting to bother me now. Get me out of here, please. My heart's starting to bother me. I refuse to go on. Let me out." Indeed, contrary to psychiatrists' predictions of expected behavior, in Milgram's first set of experiments a surprising number of subjects (26 out of 40) continued to deliver shocks at the maximum (and incidentally, fatal) level of 450 volts. Stanley Milgram, *Obedience to Authority: An Experimental View* (New York: Harper & Row, 1974), pp. 32-43.
[113] Milgram, *Obedience to Authority*, pp.32-43.
[114] Bandura, *Social Foundations*, p. 382.

bonds that create kinship. Such bonds are precisely what Leopold seems to be noting in his famous land ethic, which sought to expand the moral community to the land:

> All ethics so far evolved rest upon a single premise: that the individual is a member of a community of interdependent parts . . . the land ethic simply enlarges the boundaries of the community to include soils, waters, plants, and animals, or collectively: the land.[115]

Ironically, Leopold's attempt to expand moral considerability to the land was partially founded in an attempt to humanize the land, for once one can empathize with the land one can develop a sense of obligation towards it. Indeed Leopold speaks in terms of endearment towards the land by asking the simple and poignant question: "Do we not already sing our love for and obligation to the land of the free and the home of the brave? Yes, but just what and whom do we *love*?" [116] To be able to love the land, to be able to share with it in joy and pain, requires the development of empathy and understanding. It is what, at least in psychological terms, it is to *humanize*. Yet, to humanize the land requires more than book learning; it requires a *relationship* with the land.

Leopold recognized that traditional brick-and-mortar education was insufficient for creating an ethic. In an essay on Leopold and education, Callicott remarks that

> Leopold advocated more field and outdoor education and less passive sedentary indoor study . . . Above all, he believed that biological education

[115] Leopold, *Sand County Almanac*, p. 239, as quoted in Callicott.
[116] Ibid., p. 240 (emphasis added).

> should be ecological, that is, it should strive to impart to students an understanding of the actual living relationships of plants and animals rather than only their pigeonholes in the abstract conceptual scheme of taxonomical categories. He suggested that the ability to read the land was every bit as important as the ability to read books and that too much of the latter could be worse than none at all.[117]

Biology, with its emphasis on taxonomy, reinforces the idea that flora and fauna are discrete and hence made biologists "blind to ecological relations." More fundamentally, biology helps to enlarge the moral community, to create empathy and thus instill moral considerability in the act as well as the thought. Thus one practical step towards humanizing the land is to simply *interact* with it; to understand the land at a nuanced level, a level that personalizes the land and its biotic citizens.

If so, a serious restructuring of our society is in order; currently the typical person in the United States is almost totally insulated from the natural world. Nearly all of our interactions of the natural world come through artifacts; pieces of the world that have been transformed from beings with which to have relationships with to commodities for consumption. Indeed, even the number of field trips in the biological and environmental sciences is on decline.[118] The "humanization" of the world may take place in a variety of ways, from daily walks to regular outings. Of course, the importance of this interaction is not lost on all environmental philosophers; Holmes Rolston in his discussion of "storied

[117] Callicott, *In Defense of the Land Ethic*, p. 229.
[118] Debbie Smith, "Issues and trends in higher education biology fieldwork," *Journal of Biological Education* 39, no. 1 (2004): 6-8. It should also be noted that there are some groups which strongly emphasize direct experiences in their educational training. One notable example is the Omora initiative in Chile. See Ricardo Rozzi, et al. "Ten Principles for Biocultural Conservation at the Southern Tip of the Americas: The Approach of the Omora Ethnobotanical Park," *Ecology & Society* 1, no. 1: 43. Available at http://www.ecologyandsociety.org/vol11/iss1/art43/.

residence," for example, asks us to be perceptive of the local environment, to be aware of such nuances as what wildflowers are currently blooming or where the nearest active bird's nest is.[119] It is these direct encounters with nature that fortify the behavior associated with our moral judgments. That these direct counters are becoming more and more difficult to experience is a fact to be lamented. Still, a building of everyday encounters into our life, a continued renewal of our relationship with the world, keeps us from easily disengaging from our responsibilities to, and even attitudes concerning the environment.[120]

At the same time, one of the methods for reducing dehumanization of the natural world is a shift in language from euphemism to consequences, from an anonymous framing of action to an agentic one. As discussed earlier language and dehumanization are closely linked, each influencing the other like a positive feedback loop, creating a cycle either vicious or ameliorative. While it may be unrealistic to *always* speak of the environment in ways recognizing *in toto* morally relevant characteristics, it is nonetheless an important goal to be aimed for.

Regaining Responsibility

Probably the most prominent as well as powerful disengagement mechanism in our current social circumstances is the obfuscation of consequences. The market system relies heavily on a disconnection between individuals as consumers and individuals as moral entities. The implications of our actions are forever camouflaged behind a system of complexity, anonymity

[119] Rolston, *Environmental Ethics*, pp. 341-54.
[120] For a fuller discussion between relationships and responsibility, see Thomas Heyd, "The Case for Environmental Morality," *Environmental Ethics* 25 (2003): 5-24.

and deception. Consequences are only vaguely known and easily forgotten. In order to minimize disengagement, the entire process by which individuals create, exchange, and dispose of products needs to be revamped. First, there must be a transparent system, one in which the processes of creation, distribution, holding, marketing, and so on are clear to the consumer. The creation of this system may be accomplished through a variety of ways; eco-labeling, cradle-to-grave manufacturing, truth in advertising legislation, etc.

But even a transparent system may not be enough, especially when the only reminder of one's consequences is an intellectual one, separated from direct experiences with the injurious actions. We learn that confined animal feeding operations are responsible for polluting rivers and groundwater; yet, this knowledge is abstracted from context, learned not by drinking the fouled waters or seeing the incarcerated pigs or smelling the tons of feces that pile in great mounds. As Milgram showed, it is easier to harm others when their suffering is not visible and when our actions are spatially or temporally remote.[121] Again, continual experiential knowledge is an important factor in reconnecting actions and consequences, pointing also to a need for a new way of creating goods, an amalgamation of labor rather than a division, one where, if labor is divided, each subfunction works with the final goal in mind and the individual is fully aware of the end of their labor.

[121] Milgram, *Obedience to Authority*, pp. 32-43. Harvey A. Tilker found that even subjects with a high sense of personal responsibility were *still* more likely curb injurious actions when given strong feedback (auditory and visual) on the victim's state of affairs. In "Socially Responsible Behaviour as a Function of Observer Responsibility and Victim Feedback," *Journal of Personality and Social Psychology* 14 (1970): 95-100.

Finally, it should be recalled that moral disengagement has important soothing qualities. If an environmentalist was to continually think on the consequences of their action they would be too emotionally overwhelmed to even get out of bed. Thankfully, disengagement can act as an emotional salve, allowing one to function in a world of wounds. Yet, one must forever be conscious of this distancing and be able to reengage when necessary. As illustrated by collective-action environmentalists, the alternative is a renouncing of personal responsibility, a deactivation of the self-regulating mechanisms that prevent one from acting in ways inconsistent with their values. The environmentalist must recognize a spectrum of action. It is not possible to do everything, but this limitation does not mean nothing can be done. The degree to which an environmentalist is able to act in accordance with their values depends on context and most likely differ from one person to the next. But it is the continual reassessment of one's impact and one's abilities that will keep moral disengagement in check and bridge the gap between thought and action.

Conclusion

The third obstacle that blocks the path to sustainability concerns the translation of moral attitudes to appropriate actions. One of the requirements to achieving sustainability is that individuals act in environmentally appropriate ways. While governmental coercion may be useful in some respects for regulating behavior, it cannot always be relied upon. What is needed to compliment external regulation is an internal regulation, i.e., the inculcation of an

environmental ethic compatible with the goals of the society so individuals will behave appropriately without needing to rely on the voice of authority. In fact, a well developed ethic may even be a stronger regulating force than external coercion because individuals like to believe that they act in morally upstanding ways. Thus, the development and implementation of an environmental ethic has been seen as an important toward creating the sustainable society. Yet, studies have shown that moral beliefs are not always easily translated into consistent behavior; individuals who see themselves as highly virtuous may still engage in acts they find morally condemnable. One of the reasons for this moral failure is the process of moral disengagement which allows individuals to reconstrue the nature or impact of their acts.

For example, someone who is strongly concerned with resource conservation may still use disposable containers because the social and economic environment currently fosters disengagement. When purchased, consequences are obscured so that there is no reminder of what went into the products and or what will happen when they are disposed of (or more euphemistically *thrown away*). If there is something to be done about the rampant waste in a throw-away society, it is the responsibility of the politicians, manufactures, or disposal agencies. The allure of moral disengagement can be powerful enough to sway the most ardent environmentalist and needs to be assessed before the sustainable society can hope to be achieved.

CONCLUSION

In the previous three sections, I have examined three different but interrelated components necessary for developing appropriate behavior compatible with a sustainable society. One of the most important factors for creating the sustainable society is that individuals *continually* behave in an environmentally sustainable fashion. Yet, achieving optimal behavior in any society is difficult, and the challenge is no less with regards to sustainability. If one lives in an industrialized nation, every day one continually makes choices that can have a broad affect on environmental factors. Global warming, one of the most complicated environmental problems facing the world today, can be traced back to individual choices regarding eating habits, transportation choices, preferences in indoor climate control, and even leisure decisions. Likewise, there are a number of other environmental problems such as habitat erosion, species extinction, pollution, and sanitation that are no less linked to personal choices. Ultimately, a sustainable society requires proper decision making on the part of individual and a pattern of behavior consistent with an environmentally sensitive ethic.

The feeling of personal influence over a given a scenario is one of the key factors in determining human agency; if people believe they have no power to produce results, they will not attempt to make things happen. One of the factors that has reduced a sense of personal empowerment in the environmental realm is a perpetuation of the belief that individual actors contribute little or nothing to

environmental problems or solutions. According to this view, philosophically defended by Callicott and others, environmental problems are such as to require *mainly* group solutions. While it is undoubtedly the case that group actions are required and can be a powerful force in creating change, group action does not obviate the importance of individual actors as cultural influencers and motivators, and as *de facto* contributors to problems are solutions. Once individual actors realize the importance of their actions for a given end, they will be more likely to engage in those actions. The first factor important to developing environmentally friendly behavior patterns is the enhancement of self-efficacy in terms of environmental problems and solutions.

The second factor that plays a role in determining behavior is social pressure. Although social sanctions can be applied in a number of ways, the dominant approach to social sanctions involves governmental regulation. As a result, it is important to analyze governmental coercion and evaluate its ability to foster environmentally friendly behavior. Hobbes argues that human nature requires governmental regulation in order for people to act in pro-social ways. More recently, Hardin has used a similar argument in terms of protecting the environment from exploitation, specifically from what he calls “the tragedy of the commons.” Yet, contrary to Hardin’s reasoning, recent studies concerning the tragedy of the commons have shown that while governmental regulation may be useful at times, self-organization and communal social regulations of small communities have worked in numerous cases around the world, involving indigenous as well as non-indigenous people. Idiosyncratic factors to individuals

or groups of these communities that are important determiners in behavior are often ignored or even impeded when governmental regulation is used. Social regulations must work hand in hand with the personal beliefs, desires and goals of those being regulated. When new practices are forced upon unwilling actors, they will often choose to implement them in deficient ways that ensure their failure. Furthermore, environmental problems are such that they require constant attention to behavior and choices. Unless social forces are able to *constantly* regulate individual behavior patterns, there may be little change towards sustainability. Although government regulations hold a place in directing behavior, they must be used in tandem with an environmental ethic that cultivates a personal responsibility to act in sustainable ways.

The third factor that affects behavior is one's ability to self-regulate. While moral education is important in developing a system of values that facilitates sustainable decision making, it is not enough to ensure that individuals will act in a sustainable manner. According to Social Cognitive Theory, after social and personal standards of conduct have been adopted, self-evaluative reactions like self-condemnation and self-satisfaction work to make individuals act in accordance with their moral standards. Individuals normally refrain from activities that produce self-condemning consequences and pursue those that create self-esteem and self-satisfaction.[122] However, there are various means by which self-evaluative reactions can be disassociated from transgressive behavior, known as moral disengagement. Individuals who find themselves in situations conducive to moral disengagement will be less motivated to refrain from activities in conflict

[122] Bandura, "Social Foundations," p. 375-76.

with their values. Consequently, moral disengagement has a strong influence on the individual's behavior patterns.

In order to achievable a sustainable society these three factors must be incorporated into social, economic, and political design. These three factors do not function independently of one another; each affects the development and enhancement of another. For example, one of the consequences of increased governmental regulation is a decrease in individual responsibility. This decrease can be seen especially well in terms of the disengagement mechanism of displacing responsibility. One of the most striking results that were shown by Milgram's obedience studies was the amount of influence authority figures had over subject's decision making. Milgram discusses this point in his results,

> Subjects have learned from childhood that it is a fundamental breach of moral conduct to hurt another person against his will. Yet, almost half the subjects abandon this tenet in following the instructions of an authority who has no special powers to enforce his commands . . . It is clear from the remarks and behavior of many participants that in punishing the victim they were often acting against their own values. Subjects often expressed disapproval of shocking a man in the face of his objections, and others denounced it as stupid and senseless. Yet many followed the experimental commands.[123]

When individuals give up their moral responsibility to an authority, they are more likely to allow themselves to be participants in conduct they would otherwise find harmful. This tendency to permit harm is the unfortunate side effect of relying heavily on governmental regulation; it reinforces the notion of a central authority figure and, consequently, moral disengagement through the

[123] Milgram, *Obedience to Authority*, p. 41.

displacement of responsibility. A heavy reliance on governmental coercion can in some ways *increase* moral disengagement. Similarly, the divestment of responsibility from individual actions can have a profound effect on personal efficacy. Instead of relying on individual actions for solving environmental problems, individuals displace responsibility to elected officials who become the sole source for environmental change. Similarly, moral disengagement often works by separating individuals from the consequences of their actions. When scenarios that facilitate moral disengagement are minimized, individuals are more readily confronted with the consequences of their actions. This minimization leads to a greater sense of personal responsibility for these actions, and in cases of positive outcomes, to a higher degree of self-efficacy. With the increase in responsibility also comes a realization of moral agency. Efficacy, governmental regulation and disengagement strongly affect each other and consequently patterns of behavior.

How one implements positive change regarding these factors is a point which needs to be addressed. There has already been a tremendous amount of work regarding the usefulness and limitations of governmental coercion, both in general terms and more specifically in regards to environmental problems. As a result, there is less need to emphasize the importance of limitations with regards to governmental regulation. It is a subject that can be left to those who have spent much time and energy in addressing it.[124] Less studied is the importance of personal beliefs in terms of influencing environmental outcomes. The importance

[124] See for instance Thomas Dietz, Elinor Ostrom, and Paul C. Stern, "The Struggle to Govern the Commons," *Science* 302 (2003): 1907-12.

of self-efficacy in the political arena has been looked at, but it mostly examined in terms of the formal political process, i.e., voting, influencing politicians, and so on. Shifting some of this attention towards individual actions outside of the *explicit* political process would no doubt be helpful in creating optimal patters of behavior.

Lastly, an area that has had very little attention devoted to it concerns the relationship between moral reasoning and conduct. A substantial body of evidence has demonstrated the disinhibitory power of moral disengagement, especially in the perpetration of large-scale inhumanities.[125] There has been much less work focused on disengagement and relations to the natural world. The need for addressing possibilities for disengagement is a pressing one because moral standards are relatively useless if self-regulating mechanisms can be regularly overridden. Because optimal behavior patterns are integral to fashioning a sustainable society, a more sustained look into the creation and minimization of moral disengagement should now be seen as a high priority. While addressing these important factors in behavior will not *solve* environmental problems, it is an important and necessary step on the path to sustainability.

[125] For example, see Bandura et al. "Sociocognitive Self-Regulatory Mechanisms."

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